

JOURNAL
OF
SOUTH AFRICAN BOTANY
VOL. XVIII.

THE WOODY PLANTS OF THE BECHUANALAND
PROTECTORATE

By O. B. MILLER.

FOREWORD

Forest officers have played no small part in contributing to our knowledge of the flora of South Africa. Outstanding contributions have been made by such well-known men as Sim and Henkel. The present work by O. B. Miller is a most useful and valuable record of the vegetation of that part of South Africa which is least known to the botanist and the public in general. Although the country dealt with is some 275,000 square miles in extent, it is so sparsely populated that the total population is barely one person per square mile. Miller draws attention to the fact that the country is covered mainly by a mixture of woody and herbaceous plants and that there is very little natural grassland, which serves to emphasize the fact that the density of population and its welfare in general is largely dependent on the extent and condition of natural grassland.

Miller first became acquainted with the forests of South Africa when he joined the Forest Service of the Cape of Good Hope and was appointed to the Transkei (1907—1910). With the advent of Union he was appointed Assistant District Forest Officer in the Transkei, and from this time onwards, apart from his war service with the Royal Field Artillery in France during the 1914—1918 war, he was employed almost continuously on the demarcation of the indigenous forests of the Transkei. In 1925 he was appointed District Forest Officer at Kokstad from which post he resigned some two years later. After a short sojourn in Northern Rhodesia Miller returned to South Africa and joined the Colonial Service. He served for a short period in Swaziland and then joined the service of the Bechuanaland Protectorate.

Miller's interest in the identification of trees and shrubs dates from his appointment in the Transkei where he not only made a large collection of

plants and became familiar with them but also made it his business to know the native names of the plants as well.

It is a far cry, however, from the forests of the Transkei to the forests of the Bechuanaland Protectorate and there is little in common between them. Nothing daunted, however, Miller set himself to study these dry forests of Bechuanaland which was no mean task as the country was almost devoid of road, was for the most part waterless, uninhabited and often featureless as well. Nevertheless he has not only given us a list of the chief components of the woody vegetation but has compiled a list of their native names as well, which is a specially valuable feature of this present work.

This pioneer work of Miller's in Bechuanaland has laid a sound foundation for future botanists to build on and one hopes that the time is not far distant when similar work will be undertaken and published on the vegetation of the Protectorates of Basutoland and Swaziland.

Miller's work will stand for all time as a valuable contribution to our knowledge of the woody plants of the Bechuanaland Protectorate and great credit is due to the Director of the National Botanic Gardens, Kirstenbosch, in arranging for its publication in the *Journal of South African Botany*.

Irene,
24.3.52

I. B. POLE EVANS.

PREFACE.

The "Woody Plants of the Bechuanaland Protectorate" is really an enlarged "Check-Lists of the Trees & Shrubs of the British Empire, No. 6, Bechuanaland Protectorate" which was published under the auspices of the Imperial Forestry Institute, Oxford in 1948. Since that date a large number of fresh species have been gathered and a certain number of corrections in identification made at Kew, the National Herbarium, Pretoria and at the herbarium of the Imperial Forestry Institute.

For these my thanks are due to the Director of Kew and Mr E. Milne-Redhead of Kew Herbarium; to the Chief, Division of Botany & Plant Pathology and Miss R. Robertson and Miss J. Elffers of the National Herbarium, Pretoria; and to the Director of the Imperial Forestry Institute and Mr F. White. I must also thank various members of the Bechuanaland Protectorate civil service for obtaining specimens to confirm certain vernacular names.

O. B. MILLER.

Serondela.

1952.

INTRODUCTION.

In the following pages will be found a list of the woody plants of the Bechuanaland Protectorate mentioned in the literature available to the writer and, as far as possible, collectors' names and collection numbers. This does not mean however that all the material here referred to, distributed in many different herbaria from Cape Town and Pretoria to London and Zürich, has been examined.

As an aid to identification in the field, the vernacular names of the plants whenever obtainable have been given. The average tribesman has a good knowledge of his own plants, but is not infallible, so a brief description of the plant's most obvious characteristics has been added. The times of flowering have been watched over a number of years and are also given; beside the seasonal variation, one must allow for a range of 900 miles of latitude.

The principal collectors whose specimens are mentioned are:—

Major and Mrs. E. J. Lugard who worked mainly in the Kwebe Hills of Ngamiland. They gathered 374 species several of which were new. Their collection was described by N. E. Brown (2).

Dr Bremekamp (3) describes 204 species (omitting those already described by Brown) which were gathered by Dr van Son during the Vernay-Lang Expedition of 1930.

Dr I. B. Pole Evans' (17) collection of 1931 is listed in "A Reconnaissance Trip through the Eastern Portion of the Bechuanaland Protectorate", but that of 1937 is not given in "An Expedition to Ngamiland". His excellent descriptions and photographs of the country and its flora deserve special attention.

Dr H. H. Curson's (7) list is not included in his "Notes on the Flora of Ngamiland and Chobe". It numbered over 800 specimens. This excellent illustrated pamphlet also deserves attention.

Over a thousand of my own collection of nearly 1200 specimens in the Forest Herbarium at Pharing were destroyed by fire in 1950. Fortunately in nearly all cases, duplicates were sent to one or more of the herbaria mentioned in the Preface. A few specimen numbers of this collection cannot now be traced.

Small collections were made by Harbor and by Marloth in Mochudi district; by Miss O. Hillary and Miss R. Robertson at Pharing and by Miss Robertson and Miss J. Elffers at Serondela.

In the somewhat distant past are such well known names as Holub, Passarge, Seiner, Chapman and McCabe, whose accounts of the country they passed through gave the world its first conception of the flora of the Protectorate.

The woody plants are arranged according to the System of Engler and Prantl, thus agreeing with that used by Thonner in his "Flowering Plants of Africa", but genera and species are placed alphabetically.

As to the vernacular names: 'g' is a guttural in all true Tswana languages; otherwise it is the ordinary hard 'g'. Certain plant and place names of Bushmen origin have the clicks represented by 'c', 'q' and 'x'. "mu-", instead of "mo-" would more correctly represent this prefix to so many names used by the non-Tswana tribes of the northern Protectorate, but the Tswana orthography has generally been used.

In addition to the systematically arranged list of trees and shrubs, there is an alphabetical vernacular list of both woody and herbaceous plants. Here an attempt has been made to conform with the orthography of the various tribal languages.

BRIEF DESCRIPTION OF THE BECHUANALAND PROTECTORATE AND ITS MAIN VEGETATION-TYPES.

Area. The Protectorate is a country of some 275,000 square miles, extending from the Zambezi River in the north, through nine degrees of latitude, to the Molopo River in the south. It is 630 miles from east to west at its widest. The southern tropic crosses the railway line about thirty miles south of Mahalapye.

Of the quarter of a million square miles, five blocks of European-owned farms account for 7,500 square miles, the Crown lands of Chobe and Kalahari for 165,000. The remainder is Native Reserve.

Population. The Census of 1946 shows a total population of rather over a quarter of a million people of all races, *i.e.* about one per square mile largely concentrated on the eastern border. The total of those of European descent is 2,325; 96 Asiatics; 1,708 'Coloureds'. The 248,000 Natives include an estimated 20,000 Bushmen.

Climate. To avoid a lengthy account, meteorological data from three widely separated stations have been tabulated. These stations are

Station		Temperature in degrees Fahrenheit				Rainfall in inches mean annual	Relative Humidity	
		mean annual max.	mean for hottest month	mean annual min.	mean min. for coldest month		lowest month	highest month
Tsabong	..	84.2	Dec. 94.2	50.3	(July) 33.0	11.79	Nov. & Dec. 50	May & June 76
Kanye	..	77.5	Jan. 85.6	54.4	42.1	20.58	Sept. & Oct. 58	March 73
Kasane	..	86.1	Oct. 94.7	57.6	45.5	26.55	Oct. 41	Feb. 75

Tsabong in the southern Kalahari, Kanye as representative of the well-populated eastern strip, and Kasane in the extreme north with the highest rainfall, well within the tropics.

The outstanding climatic features are—the long late-autumn, winter, early-spring drought period; the low relative humidity; the severity of the frosts induced by the altitude of the 3,000 to 4,000 feet high plateau.

Vegetation. Except for relatively small areas, the country is covered by a mixture of woody and herbaceous plants, 'savanna-woodland' in its broadest sense; 'trees, isolated or in groups, the ground surface with a continuous or interrupted cover of herbaceous plants, principally grasses. The dry season is prolonged and the range of temperature great'. Except for a very few fringing forest species, trees and shrubs are leafless during winter.

There is very little natural grassland, *i.e.* grass unmixed with other plants. When it does occur, it is the result of prolonged inundation, as in the Okovango Delta. Many square miles, especially in the southern Kalahari, appear at first sight to be pure grassland. The trees and shrubs have been destroyed by fire and their coppice and root suckers may be found still growing, half hidden by the grass. Given protection, the land would revert to woodland.

Savanna-woodland is replaced by fringing forest along the edges of 'wet' malapos (flat, usually bankless, grass-covered drainage channels) and on the banks of permanent and intermittent rivers like the Chobe and Limpopo Rivers and the streams of the Okovango Delta. In these narrow belts closely-grown trees, some of them sixty feet high and more, form a top storey above smaller trees and shrubs. The humus-rich floor supports a dense cover of tall grasses and other herbs; or where the shade is dense, the ground is bare.

The best savanna-woodland is found in the Chobe District, where Mokusi country occurs. Leaving this behind him, the traveller, as he progresses southward, finds that the lower rainfall and the increasing severity of the frosts cause a deterioration in the quality of the stand, which becomes more open and the height-growth less. The decrease in the number of species is progressive until in the southern Kalahari, only four kinds of trees are represented. (See 'Southern Kalahari', O. B. Miller(14).)

The Main Vegetation-Types. Irvine (11) in the Northern Transvaal and Henkel (9) in Southern Rhodesia, have plotted in considerable detail the sub-types on our eastern border. It will be many years before this country with its vast unoccupied spaces can be mapped with the same degree of accuracy. The vegetation-types given below are therefore mere tentative suggestions.

1. THE NORTHERN portion of the Protectorate as far south as the southerly limit of the Mopane (*Colophosperma mopane*).

Sub-types.

(a) Mopane country. *Colophosperma mopane* dominant, usually pure as mopane woodland, mopane tall coppice or mopane scrub—the two latter forms are the result of fire. (Once burnt out, frosts may destroy the regrowth.)

(b) Mokusi country. *Baikiaea plurijuga* is the characteristic and often the dominant species. Others are mukwa, *Pterocarpus angolensis*; mupomena, *Entandrophragma caudatum*; mongongo, *Ricinodendron rautanenii*, all timber trees, with the shrubs *Popowia obovata* and *Bauhinia macrantha*. (See O. B. Miller (13).)

(c) Mogonono country. Sandy soils with *Terminalia sericea* and mosheshe (*Burkea africana*) dominant.

(d) Delta country, consisting of fringing forest, island country and grassland. Island country is seasonally flooded plain, dotted with large termite mounds which have become joined together and may be several acres in extent. These carry much the same vegetation as fringing forest—mochaba, *Ficus sycamorus*; mopororo *Lonchocarpus capassa*; mokochong, *Diospyros mespiliformis*; mokoba, *Acacia nigrescens*; a characteristic member of the association is the *Hyphaene* palm. *Garcinia livingstonei* is a true evergreen and many of the others are sub-evergreen.

(e) Acacia country. Plains where inundation for long periods has ceased, such as the bed of Lake Ngami, now carry a dense stand of Camel Thorn, *Acacia giraffae* with an occasional *A. litakunensis*. Elsewhere *A. giraffae* is often dominant, but many other acacias are there too. For a fuller description see Curson (7).

2. THE NORTH-EASTERN area where the characteristic tree, though seldom dominant, is mokoba, *Acacia nigrescens*. Other characteristic but more locally distributed trees are Baobab, *Adansonia digitata*; morula, *Sclerocarya caffra* and *Sterculia tomentosa*. The sub-divisions are:—

- (a) *Terminalia sericea*-*Combretum* spp.
- (b) *Terminalia*-*Burkea africana* on lighter soils than (a).
- (c) *Acacia* spp.—*Dichrostachys glomerata*.

3. THE EASTERN area, a fifty-mile wide strip to the south of No. 2. Sub-divisions are:—

- (a) *Acacia* spp., principally *A. litakunensis*, dominant in the valleys.
- (b) *Combretum* spp.—*Terminalia sericea* on ridges and hills.

(c) The almost pure, large-grown Camel Thorn, *Acacia giraffae*, of the Baralong farms in the south, on dolomite.

(d) *Rhus apiculatum*; almost pure on shallow-soiled, stony, ferruginous quartzite hills; e.g. between Ootsi and Ramoutsa railway stations.

4. THE SOUTHERN KALAHARI, where the only tree species are motlopi. *Boscia albitrunca*; mokwelekwele, *Acacia gillettiae*; the Camel Thorn, *A. giraffae* and mongana, *A. detinens*. For fuller description, see 'Southern Kalahari', O. B. Miller (14).

5. THE MIDDLE KALAHARI. Here the number of species is much greater than in No. 4. A notable feature is the occurrence of densely-grown copses of from a half to many acres in extent in which the timber tree morukuru, *Spirostachys africana* is dominant. This is found over an area of some 1,800 square miles in the Kwenä, Kgatla and southern Mangwato districts.

THE WOODY PLANTS OF THE BECHUANALAND
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SALICACEAE

SALIX L.

Willow. Trees or shrubs growing near water. Flrs in catkins.

1. **S. subserrata** Willd.

Shrub to 10 ft high. Locally abundant at Kasane Rapids on Chobe Riv. Frts with dingy white hairs; brchlts red; lvs. altern., glaucous, grey below. *Miller* B/946. *Rob. & Elffers* 51.

MYRICACEAE

MYRICA L.

1. **M. conifera** Burm. f.

Shrub 8 ft high, of moist places. Lvs. simple, deeply toothed; Flrs spicate. See Thonner pl. 29. *Miller* B/438.

ULMACEAE

CELTIS Tourn.

1. **C. africana** Burm. f. (syn. *C. kraussiana* Bernh., *C. rhamnifolia* Presl.) modutu (G.S.P.) mogotiri (Tlhok.)

Tree to 20 ft high, of moist spots. Bark smooth, light grey; lvs. simple, nettle-like; flrs (Sept.) inconspicuous; wood pale, with good elasticity. *Miller* B/218, B/653, B/876.

MORACEAE

FICUS L.

Wild Fig. Lvs. simple, altern. Flrs contained within a receptacle and pollinated by insects. Frts usually globose, pulpy. Juice milky.

1. **F. burkei** Miq.

moumu (Taw.)

Tree 40 ft high on bank of Okovango Riv. at Shakawe, Ngamiland. Many aerial roots. *Miller* B/432. *Pole Evans* 4138.

2. **F. gnaphalocarpa** A.Rich.

"A large spreading tree; lvs. 2—5 ins. long, $1\frac{1}{2}$ —3 ins. broad, veins as in *F. sycamorus*" (21). At Toteng, Ngamiland. *Seiner* 205.

3. **F. ingens** Miq.

moumu (gen.)

Large, heavily branched tree. 'Livingstone's Tree' at Manyana, Kanye dist. is of this sp. though here called mothlatsa. *Hillary & Rob.* 569. *Miller* B/316, B/382, B/659.

4. *F. petersii* Warb.

At Nokaneng, Ngamiland. This sp. seems nr to no. 1. *Miller B* 432. *Pole Evans* 4081.

5. *F. pretoriae* Burt Davy
mothlatsa (Ngwak.)

Tree 12 ft high nr Kanye. The 'Wonder Boom' of Pretoria is of this sp. *Miller B* 296.

6. *F. pygmaea* Welw.

On Botletle Riv. "Shrublet 1—3 ft high" (21). This seems to resemble no. 12. *Baines s. n.*

7. *F. smutsii* Verdoorn

Tree 20 ft high. Bark green-pink on peeling. 3 mis. S. of Tlopi railway siding. *Miller B* 804.

8. *F. soldanella* Warb.

moomelantsweng (Ngwak.) mhawa (Thok.)

A climber on rocks. *Hillary & Rob.* 497. *Miller B* 233.

9. *F. sonderi* Miq.

Recorded by Burt Davy in B.P. (4)

10. *F. sycamorus* L.

mochaba (G.N.P.)

Large tree of river banks in N.B.P. Lvs. light green, rough, broad as long. Bark yell. *Miller B* 443, B 1082. *Pole Evans* 4046. *Rob. & Elffers* 93. *van Son* H28949.

11. *F. verruculosa* Warb.

komoti, gomoti (G.N.P.) moumu (Mang.)

Tree 30 ft high at Sefare, Ngwato. Very common on rivers of the Okovango Delta where it forms pure, dense, low thickets stretching for hundreds of yards. *Miller B* 250, B 426. *Pole Evans* 4096, 4130.

12. *F. sp.*

mochaba (Taw.)

Shrub 3 ft high 25 mis. W. of Nokaneng, Ngamiland. Lvs. deeply lobed. Frts said to be well-tasting. Nr no. 6. *Miller B* 426.

13. *F. sp.*

Small tree 9 ft high on rocky ridge $2\frac{1}{2}$ mis. S.W. of Kabulabula. Not matched in Nat. Herb. *Miller B* 1031.

14. *F. sp.*

Large tree nr Kasane Rapids. Nr *F. capensis*, but frts glabrous. *Rob. & Elffers* 30.

URTICACEAE

POUZOLZIA Gaud.

1. **P. hypoleuca** Wedd.

ngwenyane (Kwena), mongololo (Kgat.)

Shrub 3 ft high. Flrs (Nov.) small, white. Lvs. nettle-like, white below. Wood brittle. *Hillary & Rob.* 502. *Miller* B/470, B/528. *van Son* H29033.

URERA Gaud.

1. **U. tenax** N.E.Br.

Tree Nettle. mmabi (G.S.P.)

Small tree 8 ft high in moist places. Stem & lvs. with ferocious stinging-hairs. A good fibre plant. At Pharing. *Hillary & Rob.* 464. *Miller* B/444.

PROTEACEAE

FAUREA Harv.

1. **F. saligna** Harv.

monyena (gen.) mofufu (Sub.)

Tree to 30 ft high. Flrs (Dec.—Jan.) cream coloured; raceme 9 cm. 1. Lvs. altern., linear. Bark dark, rough. Wood fairly durable in ground, grain reticulated, makes waggon felloes. *Hillary & Rob.* 612. *Miller.*

PROTEA L.

Trees & shrubs, usually on poor acid soils subject to inundation.

1. **P. abyssinica** Willd.

Sugar Bush.

Tree to 13 ft high in 'malapos' of Tati & Chobe. *Miller* B/898, B/935.

SANTALACEAE

OSYRIS L.

1. **O. compressa** (Berg.) A. DC. (syn. *O. abyssinica* Hochst.)

African Sandalwood. kwaipi (Ngwak.) = to colour.

Shrub or small tree to 10 ft high. Flrs (July-Sept.) green. Bark yields tannin & dye. Lvs. simple, entire, altern., pale green. *Hillary & Rob.* 522. *Miller* B/312, B/640, B/663.

OLACACEAE

OLAX L.

Trees and shrubs with simple, altern. lvs.

1. **O. dissitiflora** Oliv.

Tree to 20 ft high & 8 ins. d.b.h. of moist places in N.B.P. Flrs (Oct.) white. Frt egg-shaped, red. *Miller* B/252, B/1102. *Pole Evans* 4054, 4139.

XIMENIA Plum.

Lax evergreen shrubs with edible plum-like frts which make a good jelly; a valuable oil expressed from the kernel. Brchls spinose. Flrs white, glabrous without, bearded within. Common throughout B.P.

1. **X. americana** L. var. **microphylla** (Oliv.) Welw.

morotologana (gen.) mohambia (Kob.) morotologa (Taw.)

Flrs irregularly Apl to Nov. Frts Jan. Lvs. glabrous, shining. *Hillary & Rob.* 514. *Miller* B/15. *Pole Evans* 4136. *Rob. & Elffers* 80. *van Son* H28957.

2. **X. caffra** Sond.

morotologa (gen.) morotonoga (Taw.) moretologa kgomo (Mal.) mohambia (Kob.)

Lvs. larger than no. 1, tomentose. Flrs Sept.—Dec. Frts Nov.—Feb. *Hillary & Rob.* 521. *Mrs Lugard* 58. *Miller* B/34.

3. **X. rogersii** Burt Davy

Hardly distinguishable from no. 1. *Mrs Lugard* 3.

LORANTHACEAE

Common shrubs parasitic on other woody plants, especially *Acacia* and *Combretum*. Frts are succulent and make a bird-lime.

LORANTHUS L.

palamela (gen.) ubulimbu (Kalaka)

Flrs often red, conspicuous. Lvs. simple, well developed. F.T.A. describes 215 African spp.

VISCUM L.

mistletoe. palamela (gen.)

About 50 African spp. Flrs minute, greenish. Lvs. usually reduced to scales, rarely foliaceous.

CHENOPODIACEAE

SALSOLA L.1. **S. rabiena** Verdoorn

Saltwort.

Shrublet 3 ins. high. Lvs. very small, succulent. Flrs (Meh) straw-coloured. In lowest part of grass-covered pan of Kachwani nr Tsane, Kalahari. *Miller* B/1012.

SUAEDA Forsk.1. **S. fruticosa** Forsk.

tuu (Sarwa) = night.

Plant of 2—3 ft high, of alkaline soils. Smells unpleasantly. Lvs. & bracteoles small, fleshy. Common on edge of Makarikari. *Miller B/941. van Son H28927.*

AMARANTACEAE

AERVA Forsk.

1. **A. leucrura** (L.) Moq.
togotsau (Taw.)

Plant of 2—3 ft high, often only semi-woody. Lvs. entire, altern., flat & appressed to stem. Flrs (Feb.) white, when dry used to stuff pillows. *Curson 9, 496. Miller B/364. Pole Evans 4069. van Son H28744, H28945.*

2. **A. tomentosa** Forsk.

"Stem suberect, 2—4 ft high; lvs. 4 ins. by 1 in.". F.T.A. Kwebe Hills. *Lugard 180.*

MARCELLIA Baill.

Inflor. of 2 fertile & 2 sterile flrs, latter reduced to bristles.

1. **M. bainesii** (Hook. f.) C. B. Clarke

"Perennial of about 18 ins. high. Flrs greenish-white" (2). Kwebe Hills. *Mrs Lugard 158.*

NYCTAGINACEAE

COMMICARPUS Standley

1. **C. plumbagineus** (Cav.) Standley (syn. *Boerhaavia plumbagineus* Cav.)

Climber with woody base. Flrs (Apl) white. Serondela & Kwebe Hills. *Lugard 14, 41. Miller B/1028.*

PHAEOPTILON Radlk.

1. **P. spinosum** Radlk.

Shrub with spinose brchls. Lvs. linear, light green, verticillate. Frts winged as in *Combretum*. Goats are said to spare this plant. *Scholtz s.n.*

CAROPHYLLACEAE

POLLICHIA Soland

1. **P. campestris** Soland
moroto a piri (Kgat.)

Shrublet 18 ins. high at Mochudi. Flrs. (Jan.) small, with fleshy bracteole. Lvs. opp. or whorled. *Miller B/406.*

RANUNCULACEAE

CLEMATIS L.

Travellers' Joy. Old Man's Beard. mogau (gen.)

Climbers with woody base to stem which may be 3 cm. in diam.

Frts fluffy, dirty white. Flrs pale yell., conspicuous. As the native name indicates, the plants are regarded as poisonous.

1. **C. brachiata** Thb.

Flrs Apl. A plant of the N.B.P. *Lugard* 229. *Miller* B 1027. *van Son* H28990.

2. **C. oweniae** Harv.

Flrs Mch. A plant of the S.B.P. *Miller* B 569, B 837.

ANNONACEAE

ARTABOTRYS R.Br.

1. **A. sp.** nr *A. brachypetalata* Bth.

Tree with stem 13 ins. diam. with many lax, almost trailing branches. Lvs. simple, altern. Flrs (Oct) yell. with green calyx, set on a bent knee-like peduncle. At Kasane Rapids. *Miller* B 1080, B 1098. *Rob. & Elffers* 95.

POPOWIA Engl.

1. **P. obovata** Engl. & Diels

mochinga, mochingachinga (G.N.P.) mokondekonde (Mbuk.)

Shrub of the Baikiaea forest. Flrs (Jany) pale green, sepals 3. Frts (Apl) pink, fleshy, constricted over the seeds. Lvs. simple, altern. *Miller* B 5, B 107, B 1133. *van Son* H28766.

XYLOPIA L.

1. **X. antunesii** Engl. & Diels

Tree 20 ft high in Baikiaea forest. Flrs (Mch) with yell. petals, crimson stamens and yell. carpels. Lvs. simple with pale yell. midrib. Only one tree seen. *Miller* B 132.

CAPPARIDACEAE

1. **BOSCIA** Lam.

Trees or shrubs with simple, altern. lvs.

1. **B. albitrunca** Gilg. & Ben.

motlohi (G.S.P.) motopi (Taw.) mongone (Kal.)

Tree to 35 ft high and 3 ft d.b.h., but usually much smaller. Bark whitish to grey-brown. Flrs (Aug.—Oct.) green-yell. Frts edible. Roots make a coffee substitute. Wood made into spoons, etc. A useful browse tree said to keep cattle alive when all grass has died off in S.W. Kalahari. Widespread. *Miller* B 13, B 669.

2. **B. corymbosa** Gilg

motupa (Sub.) mubite (Kol.)

Tree of N.B.P., much like no. 1. B 123 is a pubescent form. *Miller* B 22, B 123, B 638.

3. **B. foetida** Schinz

Found by Gerstner in S.W. Africa very near our border where it should be sought.

4. **B. hexamitocarpa** Ch. Gilg

Shrublet 2 ft 6 ins. high on bank of Simanwana stream on Maun—Francistown road. Flrs Oct. *Miller* B/951.

5. **B. kalachariensis** Pest

nimpipi

Small tree at Dowa Pan between Maun and Francistown. Much like no. 8. *q.v.* *Miller* B/152.

6. **B. matabeliensis** Pest

"distinguished by its broader, more ovate-lanceolate lvs. occurs just across our [i.e. Transvaal] border nr Tati." (4). This is the only record of its occurrence.

7. **B. macrophylla** Oliv.

"Evergreen tree of bushy nature; flrs green" (2) Kwebe Hills. *Mrs. Lugard* 27.

8. **B. rehmanniana** Pest

mopipi

Tree to 16 ft high. S. limit of range, N. part of Kanye dist. Flrs (Sept.) foul-smelling. Lvs. small, appressed to the branches. Wood used for carving. The tree is often left standing in fields. A gregarious, dwarf form about 6 ins. high in S. Kanye dist., called "motlhopi hatsi" may prove to be a new sp. (*Miller* 902.) *Miller* B/666. *van Son* H28815.

9. **B. tomentosa** Oliv.

"on 'Lake' River, Maun" (2) *Lugard* 18.

10. **B. sp.** cfr. *B. salicifolia* Oliv.

Pole Evans 4120, 4159.

CADABA Forsk.

Stamens and carpels borne on inch-long gynophore. Lvs. in whorls.

1. **C. juncea** (Sparrm.) Harv.

Flrs (Sept.) large, scarlet-yell. or purplish. Lvs. reduced almost to non-existence. Branches very thin, smooth, green, terete. *Miller* B/369, B/903.

2. **C. termitaria** N.E. Br.

Shrub 3 ft high. Gaberones & Ngamiland. *Hillary & Rob.* 562. *Mrs Lugard* 11. *Lugard* 2. *Miller* B/244, B/376. *Pole Evans* 4140.

CAPPARIS (Tourn.) L.

Shrubs, flrs usually large, apetalous, with many long staminal filaments.

1. **C. tomentosa** Lam.

motawana (Taw.) modyangwe (Mbuk.)

Evergreen rambling shrub of termite mounds. With support it can reach a height of 35 ft. Flrs (Sept.) white or pale yell., conspicuous. Frt brown, globose, 5—6 cm. diam. The spines, in prs, are probably modified stipules. The whole plant is tomentose. *Miller* B/42.

2. **C. sp.** cfr. *C. oligantha* Gilg & Ben.

A climber of Chobe dist. Flrs (Aug.) cream-coloured. *Miller* B/1087. *Rob. & Elffers* 108.

COURBONIA Brongn.

1. **C. camporum** Gilg & Benn. So identified, but may prove to be *Maerua flagellaria* q. v. *Miller* B/38.

MAERUA Forsk.

Lvs. simple except no. 5.

1. **M. angolensis** DC.

"Evergreen tree 6—20 ft high of Kwebe Hills" (2). Also in "temperate B. P. Flrs (Sept.—Oct.) white with pale yell. stamens" (4). *Lugard* 26. *Mrs Lugard* 28.

2. **M. crassifolia** Forsk.

"on a termite mound at Pilane" (4) *Burt Davy* 20465.

3. **M. flagellaria** (Oliv.) Gilg & Benn.

Shrub 3 ft high of N.B.P. "Sepals and petals green, staminal filaments greenish white" (2). See *Courbonia camporum*. *Lugard* 135A. *Miller* B 38.

4. **M. legatii** Burt Davy.

Lax shrub 2 ft high at Borehole no. 3, C.D.C. ranch, Chobe. Flrs (Sept.) white. Frts (Feb—Mch) legume-like, edible. *Miller* B/932.

5. **M. maschonica** Gilg.

Branchy climbing shrub of Chobe Riv. bank and in Mochudi village. Frts (Jan.) globose, edible. Lvs. simple or compound. Flrs (Oct.), anthers, sepals and outer side of petals green, pistil and stamens white. *Miller* B/526, B/668, B/874, B/949.

6. **M. schinzii** Pax.

moratlhetla, moratlhetle, moomani (S.P.).

Tree to 30 ft high. Flrs (Oct.—Dec.) white, showy. Frts (Dec.—Jany) legume-like, moniliform. Bark whitish, inner bark black; much used by native "doctors", purpose not known. Wood white, when dry shelling into concentric rings, $\pm$ 2 cm. wide. *Grant* 8. *Hillary & Rob.* 538. *Miller* B/230, B/328.

MYROTHAMNACEAE

MYROTHAMNUS Welw.

1. **M. flabellifolius** (Sond.) Welw.

Resurrection Plant. monnaokgang (G.S.P.).

Shrublet 2 ft high in shallow soil above sheet rock. Lvs. simple, fan-shaped, wrinkled. A dry, apparently dead stem, if placed in water will come into leaf within 36 hours. Flrs (Aug.) inconspicuous. *Hillary & Rob.* 545. *Miller* B/378.

ROSACEAE

PARINARI Aubl. Often misspelt "Parinarium".

Plant with simple lvs. grey below.

1. **P. capensis** Harv.

mmola (G.S.P.) mola hatshe (Taw.) mobola hatshe.

Shoots of a few inches high from a large, much branched underground stem. Frts 3—4 by 2 cm., grey-brown, make a native beer. Flrs (Nov.) small, yell. *Miller* B/356, B/709.

2. **P. mobola** Oliv.

mobola (G.N.P.).

Tree to 30 ft high. Lvs. and fruits much like no. 1. Occurs sparingly in N.B.P. *Miller*.

CONNARACEAE

BYRSOCARPUS Schum. & Thonn.

Shrubs with pinnate lvs., the lfts often so distant as to resemble lvs.

1. **B. orientalis** Baill.

monwana (Mang. & Kgat.)

4—8 ft high. Stem with occasional bristle hairs. Flrs Nov. Frts (June) small, globose. *Miller* B/23, B/79.

2. **B. tomentosus** Schellenbach.

Lax plant of moist places in N.B.P. Flrs (Oct.) white. Frts Nov.—Dec. *Miller* B/925B, B/1099, B/1116. *Rob. & Elffers* 53.

LEGUMINOSAE

Plants with pinnate lvs., except *Baphia*, and frt a pod (legume), except *Pseudocadia*. Subdivisions I Mimosaceae, II Caesalpineae, III Papilionaceae.

ABRUS L. III.

1. **A. precatorius** L.

Crab's Eye. mopiti (Taw.). mutenena (Mbuk.). and mophete.

Woody twiner with tendrilled brchltls. The pods, 2—3 cm. 1. are twisted and contain many scarlet and black "lucky beans" much used for ornament. *Curson* 731. *Miller* B/1159. *Rogers* 6498.

ACACIA Willd. I.

The African spp. are all armed, thus distinguished from certain acacia-like Albizzias. The inflor. is either spicate or globose. These, with two exceptions, have respectively brown recurved spines and white straight spines, though a few spp. have globose inflor. with straight, but recurved spines at the ends of the brchltls. Lvs. are 2-pinnate. Flrs white to yell. are pollinated by both long and short-tongued insects. The genus provides edible gums, durable wood, cattle feed from pods and inferior cordage from bark.

1. *A. albida* Del.

Winter Thorn. munga (Kol.) kananga and mokosho (Mang.)

Tree to 60 ft high only found on alluvial soils. Flrs (June, Aug.) spicate, pale yell. Pods large, spirally twisted, shining, bright yell., seeds embedded in white spongy tissue and although greedily eaten by stock, are used in N. Rhodesia to stupify fish. Lvs. glaucous, pinnae 3—8 prs, lfts 9—15 prs, the apical prs usually broadest. Bark grey, corky, on the brchltls white with longitudinal lines of green. In mature trees the leafless period is during summer. A frost-tender sp., its S. limit of range is in Ngwato. *Miller* B/44, B3141. *Pole Evans* 4191. *Rob. & Elffers* 100. *van Son* H28897.

2. *A. amboensis* Schinz.

Flrs globose. "Lfts in 20 prs" (1). Gathered at Nata and in Ngami-land. May be conspecific with *A. woodii*, in which case the latter name falls away. *Curson* 106. *Pole Evans* 4087, 4121. *van Son* H28872, 28873, 28874.

3. *A. arabica* Willd. var. *kraussiana* Bth. (syn. *A. benthamii* Rochbr.) motshi (Mang.) moshu, mhure, mokga (Ngwak.) motabakgosi (Taw.) motsha (Kgat.) sinzi (Kol.) gu (Sarwa)

Tree about 10 ft high. Flrs (Oct.—Nov.) globose, deep orange coloured. Up to 8 peduncles springing from the same point. Lvs. with about 4 prs pinnae, lfts small, to about 20 prs. Pods to 22 cm. 1., 1.5 cm. b., black, glabrous, moniliform, with wide margins (subalate), greedily eaten by cattle although containing much tannin. The sp. may be conspecific with *A. subalata* Vatke. *Hillary & Rob.* 530. *Lugard* 28. *Mrs Lugard* 30. *Miller* B/14, B/54, B/1073. *Rob. & Elffers* 70.

4. *A. arenaria* Schinz (syn. *A. rufo-brunnea* N. E. Br.).

Flrs globose, pale yell. "Involucel nr apex of peduncle. Pinnae

very numerous, up to 35-jugate; lfts in about 20 prs, linear-oblong, very small." (1) Botletle vall. The validity of this sp. doubtful. *Lugard* 245, type of *A. rufo-brunnea* N. E. Br.

5. ***A. ataxacantha*** DC. *var. australis* Burt Davy (syn. *A. eriadenia* Bth.)

mokgwa (Kwena) mokona (Kol.) mokuku (Taw.) mogotau (Sub.)

Sprawling shrub or small tree of lax habit of N.B.P. Flrs spicate, yell. Spines scattered. Lvs. with or without prickles on midrib; lfts 20—40 prs. Bark yell.-brown. Probably the same as *A. lugardae* N. E. Br. *Curson* 584. *Mrs Lugard* 195. *Miller* B/182, B/425.

6. ***A. burkei*** Bth. (syn. *A. mossambicensis* Bolle)

mokgwa (Kwena & Ngwak.) mokoba (Mang. & Taw.) mokotokoto.

Tree to 45 ft high. Flrs (Oct.—Dec.) spicate, pale yell., which have withered before the new foliage appears. The recurved spines are often enlarged and remain on the larger branches. Lfts 3—4 prs, the apical pr usually largest. Pods flat, red to chocolate remaining on the tree over winter. Bark on young trees white, flaky, on old trees dark and rough. Brchls often infested with round galls of $\frac{1}{2}$ in. diam. Not seen N. of Francistown. *Hillary & Rob.* 531. *Miller* B/272, B/371, B/492.

7. ***A. caffra*** (Thbg) Willd.

morutlhatana (Ngwak.) morutlhwane (Kwena) morutlhari (Mal.) morutlhatshana (Ngwak.)

Tree to 25 ft high. Flrs (irregularly Aug. to Jany.) spicate, pale yell. to white. Pods thin, pointed both ends. Lvs. to 24 cm. l.; pinnae about 9 prs to 7 cm. l.; lfts about 10 prs; the rachis may have small recurved prickles on dorsal side. Some lvs. have a gland between base of lf-stalk and first pr of pinnae and 2 or 3 glands at bases of pinnae. *Hillary & Rob.* 529. *Miller* B/276, B/210, B/215.

var. tomentosa Burt Davy.

monganakudu, *teste* Curson

Ngamiland. *Curson* 51, 55, 173.

8. ***A. campylacantha*** Schinz

White Thorn

Tree to 35 ft high. Flrs spicate, pale yell. Lvs. of 15—30 pinnae and 10—40 prs small lfts. Spines in prs on cushions. Bark grey. Matetsi vill., Chobe. *Miller* B/928.

9. ***A. cinerea*** Schinz (syn. *A. fleckii* Schinz)

mhahu (Sub.) mokoka (Kol.)

Tree to 30 ft high, sparsely distributed on eastern side of B.P. from N. to S. Material named *A. cinerea*, *A. fleckii* and *A. mellei* was compared

by Exell at Zürich with the types of the 2 first mentioned spp. He found these two conspecific and so the name *A. fleckii* falls away. According to White of I.F.I. *A. cinerea* "differs in several minor characteristics from *A. mellei*". Flrs (Dec.) pale yell. to white. Lvs. and lfts very small with minute prickles on rachis. Bark pale, rough, papery or flaky near base of bole, but not so white as *A. dulcis*, is straw coloured higher up the tree and smooth on branches. Brchlts grow from between prs of horny recurved spines. *Fleck* 412 collected at "Chansis", (? Ghansi), type. *Lugard* 93. *McCabe* 29. *Miller* B/11, B/14, B/16, B/81, B/445, B/499. (B/14 and B/16 were the material used by Exell). *van Son* H28871.

10. ***A. detinens*** Burch. (syn. *A. ferox* Bth.)
mongana (gen.) monka (Kgat.) monyaka (Kwena) moga (Kal.)

Small tree very occasionally to 20 ft high. Flrs (Aug.—Sept.) are between globose and spicate. Spines dark, recurved. Pods very thin, flat, about 35 mm. l. with few seeds, papery when dry (Nov.) Lvs. with 1, occasionally 2 prs of lfts which are ovate, 10 mm. l., 4—5 mm. b. Bark black or dark brown. Hab. clayey soils. *Hillary & Rob.* 535, 593. *Mrs Lugard* 13. *Miller* B/30, B/55, B/619. *Rob. & Elffers* 72.

11. ***A. dulcis*** Marl. & Engl. (syn. *A. kwebensis* N. E. Br.)
moloto (gen.) morengambo (Mbuk.)

Tree about 15 ft high. Flrs (Sept.—Oct. Feby.) spicate, pale yell. or white. Pods linear-oblong, 7 cm. l., 2.4 cm. b. (Apl.—June) dark red-brown, veins transverse from margin to margin. Spines in prs, sharp, recurved. Wood durable. Bark flaky, white. Lvs. 5 cm. l. with about 6 prs pinnae and 20 prs lfts which are contiguous. A gland on rachis $\frac{1}{2}$ way between base and first pr of pinnae, no prickles. S. limit of range latitude of Ootsi. *Mrs Lugard* 24, type of *A. kwebensis*. *Miller* B/546, B/667. *Pole Evans* 3190, 4019, 4117.

12. ***A. erubescens*** (Oliv.) Welw.

Shrub 4 ft high at Borehole no. 3, C.D.C. Ranch, Chobe. Collection notes missing. "Small tree. Spines short, recurved. Pinnae in 4—5 prs, lfts 10—14 prs. Flrs rose white, calyx grey-tomentose, petals pubescent outside" (1) The inflor. is spicate. *Miller* B/936.

13. ***A. galpinii*** Burt Davy
mokala (gen.)

Tree to 60 ft high of river banks. Trees round Serowe kgotla are of this sp. Flrs very small set on a spike 6—9 cm. l. (Aug.) flr buds red-brown. Pods flat, about 20 cm. l, 3 cm. b. Lvs. with about 12 prs pinnae and 25 prs lfts. Bark pale. Young trees confusable with *Albizzia rogersii*, but latter unarmed. *Miller* B/278, B/877, B/1089. *Pole Evans* 4116.

14. **A. gerrardii** Bth.

moki (Mang.)

Small tree of "black turf", common nr Serowe. Flrs (Dec.) globose, white. Pods 4—5 cm. l., 1 cm. b. Lvs. with about 14 prs lfts 2·5 mm. l., 1 mm. b. (*Miller* B/1004 moka (Kal.), mokwelekwele (Ngwak.) was gathered in the Kalahari 30 mis. west of Kanye, there very common. It was named *A. gerrardi* at Nat. Herb. and "*Acacia* sp." at Kew.) *Curson* 581. *Miller* B/202, B/1004.

15. **A. gillettiae** Burt Davy

mokwelekwele (gen.) moka (Kal.)

Common tree in S.W. Kalahari, to 30 ft high. Flrs (Mch—Apl) globose, white with yell. anthers. Pods conspicuous in winter, chocolate-brown, as are also the brchlts. Spines mostly brown and recurved on young, but straight and white on old trees. *Miller* B/346, B/912, B/1152. (B/912 so determined at Kew. But for this, *Miller* B/1004, *A. gerrardi* would have been included here.) *Pole Evans* 4147.

16. **A. giraffae** Burch.

Camel Thorn. mogotho (Taw.), mokala (Ralong & Ngwak.), mogotlho (Kwena), mosu (Mbuk.).

Tree to 35 ft high. Flrs (Aug.—Sept.) globose, bright yell., fragrant. Frts large, woody, semi-lunate or boat-shaped with downy surface, seeds embedded in white pulp; a good cattle food. A form with terete crescent-shaped pods found in Ngamiland (*Miller* B/419). Spines long, white, often swollen by insect attack. Brchlts smooth, deep red, zig-zagging at each pair of spines. Bark brown-grey, thick, fibrous, somewhat reticulated, with occasional very narrow horizontal cracks. Not frost-tender, it is large and common on the Baralong farms. The roots are very foul smelling. *Hillary & Robertson* 605. *Miller* B/35, B/419, *van Son* H28869.

17. **A. goeringii** Schinz

Collected at Motlhatlogo, Ngamiland. Flrs globose. "Pinnae 8—12 prs, lfts up to 19 prs, linear-obtuse, about 3 mm. × 1 mm. Pod 2-seeded. straight, flat, obtuse and more or less constricted in the centre, 7 cm. × 17 mm." (1) *van Son* H28870.

18. **A. grandicornuta** Gerstner

moshaoka (general)

Branchy tree 12—15 ft high common near Mochudi and Ramoutsa. Flowers globose, pale yell. Pods somewhat falcate (less so than those of *A. karroo* which the tree resembles somewhat, but its bark is greyish, not black or dark brown). Branches often with round, $\frac{3}{4}$ inch diam. galls. *Miller* B/391, B/410.

20. **A. haematoxylon** Willd.mokholo (*teste* Gerstner)

Collected by the late Father Gerstner "between Molopo and Nossop rivers". He describes it as "a graceful little desert tree, 6 inches in diameter and 20 ft high, apple-shaped, with bark like *Halleria lucida*, medium grey. At a superficial look pinnate, but the magnifying glass shows it twice pinnate. Inflorescences of yellow flower heads."

"Stipular spines, mostly long and straight. Lvs. with 3—19 prs of pinnae, short; lfts in 18—24 prs. Pod linear, falcate, incano-tomentose, seeds distant." (1) *Gerstner* 6274.

21. **A. hecatophylla** Steud.

"Tree with hoary-tomentose branches. Pinnae in 18—20 prs, lfts linear-oblong, obtuse, in 30—50 prs. Petals united about the middle, slightly exceeding the calyx. Pod oblong, firmly coriaceous, 3—7 seeded, 10—16 cm. $\times$ 2.3 cm." (1).

The flr is spicate. A tree of Abyssinia and Uganda. Its occurrence near Pilane railway station, the only record in the Protectorate, is peculiar. *Burt Davy* 20462.

22. **A. hereroensis** Engl.

Collected in Ngamiland. "Lfts 20—25 jugate, very small. Prickles scattered; bark reddish-brown. Pod flat, narrow, linear, 8—10 cm. $\times$ 1.5 cm." (1). The flower is globose. *Curson* 487,582.

23. **A. karroo** Hayne (syn. *A. horrida* Harv.)

mooka, mookana (general) mokha (Kgal.) Gaba and butema (Kalaka)

Tree to 30 ft high, found largest on deep "black turf" soils. Flrs globose, bright yell., sweetly scented (Dec.—Feb.) but in Ngamiland seen in flower in March. Pods falcate, thin with distinct margins, 6—10 cm. $\times$ 5—8 mm. Bark black-brown or black in old trees. Young bark much used for cordage. Wood yell., not durable. Yields an edible gum formerly exported under name of "Gomme du Cap". Leaves with 1—3, rarely 4 prs pinnae and 6—15 prs lfts, 5—10 mm, l. *Curson* 467. *Miller* B 343.

24. **A. kirkii** Oliv.

ijwairi (Sub.) moralo (Taw.)

Tree to 20 ft high. The branches start low down on the trunk with which they form an acute angle. Flrs globose, yell., with a pink tinge (Nov.). Pods stipitate, linear-oblong, constricted between the seeds above each of which is a prominent tubercle. Bark smooth, shining, green-brown. Leaves 6 cm. l., pinnae about 12 prs, lfts very small, about 16 prs. Only found on ground subject to inundation, from Makari-

kari N. Miller B/116, B/896. Pole Evans 3152, 3317. Robertson & Elffers 54.

25. **A. litakunensis** Burch. (syn. *A. heteracantha* Burch. *A. spirocarpoides* Engl.)

mosu (Kwena & Taw.) moshu (Mang.), mosunyane (Kgat.)

A very common tree to 20 ft high. Flrs globose, small, pale yell. (Nov.—Jan.), sweet scented. Spines straight, white, shining except for a few at the end of each brchlt. which are short and recurved. Pods (March—June) spirally twisted, about 50—60 mm. l. measured along the spiral. Lvs. and lfts are small. The wood is useless.

Much resembles the larger *A. spirocarpa* but crown not mushroom-shaped and frts much smaller. Curson 270, 460, 770. Mrs Lugard 49. Miller B/70, B/506.

26. **A. lugardae** N. E. Br.

Collected by Mrs Lugard in the Kwebe Hills, Ngamiland. A tree to 15 ft high, "similar to *A. caffra* but is distinguished by the prickles on the leaves." (3). Brown continues that it has shorter and fewer seeded pods. [*A. caffra* frequently has prickles on the leaves. O.B.M.] "A close ally of *A. caffra* and very similar to *A. ataxacantha* DC var. *australis* Burt Davy." Mrs Lugard 195, type.

27. **A. mellei** Verdoorn

Tree to 25 ft high. Pod flat, pointed, young pods densely gland-dotted. Lvs. with conspicuous stalked gland below lowest pr of pinnae, lfts small, contiguous. Flrs (Nov.) are spicate, pale yell. Close to *A. cinerea*. Miller B/499, B/597, B/575, B/718, B/950.

28. **A. nebrownii** Burt Davy (syn. *A. glandulifera* (Schinz) Baker and *A. rogersii* B. Davy)
lerwana (Kgat.) See Verdoorn (24).

Tree 9 ft high. Flrs globose, canary-coloured. On Miller's specimens collected 16 miles N. of Kanyu on Maun-Francistown motor road and on farm Lovelswood, Tuli Block, the sessile glands on the leaves are wanting. Mrs Lugard 14, 16. Miller B/939 (Kew det.), B/372, B/491.

29. **A. nigrescens** Oliv. (syn. *A. pallens* Rolfe)

Knobby Thorn. Knobbybark. mokala (general) ungandu (Mbuk.) more o mabele (Mang.)

Common tree from Ngwato N., especially on edges of Okovango Delta. Flrs spicate, pale yell. (Aug.—Oct.). Pod flat, pointed (Feb.—March). Lvs. with 3 prs of pinnae, lfts in 1 or 2 prs about 10 mm. as broad as long, glaucous. Usually stem and branches studded with many enlarged knobthorns with layered, corky bases to 4 cm. in diameter,

sometimes touching each other and enclosing the whole stem. Wood heavy, hard, durable. *Lugard* 246. *Miller* B/317, B/435, B/894. *Pole Evans* 3181, 4085. *Robertson & Elffers* 64, 89.

30. **A. pennata** (L.) Willd.
mokukari (Mang.)

Bramble-like, sprawling shrub but sometimes climbing to 40 ft high, with globose, yell. or white flrs at ends of branches. Lvs. with many prs of lfts. with a nectary at base. A plant of moist soils in N.B.P. *Curson* 689. *Miller* B/256.

31. **A. rehmanniana** Schinz
mgaba (Kalaka)

A tree of the Tati dist. Flrs globose, white. Pods short with thin valves, blackish, distinctly nerved and with a slight longitudinal ridge in middle. Bark on branches smooth, red-brown, in contrast to the dark, rough, fibrous bark of the bole. *Miller* B/921. *Pole Evans* 3257.

32. **A. retinens** Sim
kangarangana (Mbuk.)

Small tree with yell. globose flrs. Pod veined, shining (but slightly hairy under lens). Leaves with 4—5 prs of pinnae and 10 prs lfts, very small and hairy under lens. *Miller* B/445. *Pole Evans* 3170.

33. **A. robusta** Burch.
moga (Kwena) moku (Ngwak.)

Tree 15—20 ft high. Flrs globose, white to pale yell. Pods s'raight, broad, veined. Brchlts swollen, with a few prs of recurved spines at their extremities; the other spines straight, long, white. Lvs. in 3s on spiky cushion between prs of spines. *Miller* B/409. *van Son* 28864.

34. **A. seyal** Del.

Collected on Botletle river near Lake Ngami. Flrs globose. "Tree up to 30 ft high with cinnamon coloured, powdery bark. Spines patent, slender or short and recurved. Pinnae usually 2—4 prs, lfts 8—20 prs. Flrs yell., corolla divided near the apex, not as far as the calyx. Pod linear, falcate, slightly constricted between the seeds," (1). *Pole Evans* 4093.

var. multijuga Schweinf.

Collected on Tati river. This variety differs from the type "in having more numerous pinnae, usually 8—10 pairs". *Pole Evans* 3251.

35. **A. spinosa** Marl. & Engl. (syn. *A. rostrata* Sim)

Differs from *A. senegal* in having pubescent peduncles and rostrate pods. Flrs spicate, white. Spines in 3s. Collected on Dikhatlong Ranch.

Baker places this sp. under *A. senegal*. *Pole Evans* 3189.

36. **A. spirocarpa** Hochst.

moshu (general)

Tree to 40 ft high, the branches confined to the mushroom shaped crown. Common in Chobe and Maun. Only differs from *A. litakunensis* in its habit and much longer frts. Flrs (Nov.—Dec.) globose, small, pale yell., almost white. Lvs. small, to 30 mm. long; pinnae about 7 prs 10 mm. l. and 0·5 mm. b.; rachis and pinnae hairy. Spines recurved on brchls, otherwise straight and white. Pods twisted, 5 mm. b. and 100 mm. l. measured along the twist, pubescent, parallel-veined. Roots foul smelling. *Miller* B/506, B/891, B/1127. *Robertson & Elffers* 71.

37. **A. stolonifera** Burch.

sitshi (Taw.) siki, setshe (Ngwak.)

Shrubs of slender, coppice-like, usually unbranched stems, about 2½ ft high, growing from underground trunks. They grow gregariously forming low thickets several yards in diameter which, by arresting silt, become raised above the general level of the surrounding land. Flrs globose. Pod erect, woody, distinctly veined, about 10 cm. long and 2—2·5 cm. broad. Occurs throughout the B.P. but less common in the N. *Miller* B/660.

Acacia stolonifera Burch. var. **chobiensis** O. B. Miller var. nov.

A typo differt habitu et fructibus grandibus. Arbor robusta ad 5 m. alta, trunco inferiore ad 45 cm. diam., recto, sed ramis inferioribus saepe contactis terrae. (Planta tota formae semi-orbis circiter 5 m. diam.). Fructus circiter 13 cm. longus et 4·5 cm. latus, rectus, lignosus, venis distinctis. Semina circa 30, in funiculis longis 1·3 cm. Typus in herb. *Kew.* *Miller* B/1069.

sitshi (Taw.) mukona (Kol.) chiwonza (Sub.)

Tree occasionally 16 ft high and 18 ins. diam. below first fork which is usually low down and of which the branches may be 14 ins. in diam. It tends to form a semi-spherical mass, the lower part of which touches the ground. The inflo. (Aug.—Sept. and very sparingly in June) is fragrant, pale yell. and in all respects as in the typical form. The difference lies in habit and the much larger frts of the variety. These pods are to 13 cm. l. and 4·5 cm. b. with about 16 seeds on each valve borne on funicles about 1·3 cm. l. Lvs. hairy, about 4 cm. l. of 8—9 prs pinnae 18 mm. l. and 20 prs lfts about 3 mm. l. Bark of brchls smooth, lenticular; bark of older wood rough, fibrous, dark. Roots foul smelling. Hab. banks of rivers. *Miller* B/1069, B/1107, B/418. *Rob. & Elffers* 44.

38. **A. uncinata** Engl.

mooku (Ralong)

Tree 30 ft high on main road west of Pilane-Molopo and thus some

yards outside the boundary of the Protectorate, where it is said to occur sparingly. Flrs globose. "Branches blackish. Pods 5—8 cm. l. and about 8 mm. b. Spines stipular, uncinat[e] [= recurved]. Lfts in 6—7 prs. linear, obtuse" (1). In my specimen which was compared in the Nat. Herb. with authentic material, they are in about 20 prs. Gerstner considers this species conspecific with *A. retinens*. *Miller* B/523.

39. **A. woodii** Burt Davy

morumasela (Sub.) morumasetlha (Taw.)

Large tree of the N.B.P. Flrs globose, yell., sweet smelling (Sept.—Nov.) Pods large, woody, dark yellow, exuding gum when punctured (May—June). Bark flaking, brown-yellow but bright yellow on ends of branches. Lvs. to 12 cm. l., pinnae about 20 prs, lfts 20—30 prs 4 mm. × 1 mm. The straight spines to 5 inches long. Wood fibrous, pale yell., heartwood not distinct. This species may prove to be conspecific with *A. amboensis* in which case the latter is the valid name. *Miller* B/50, B/71, B 428.

40. **A. xanthophloea** Benth.

Fever Tree. more o mosetlha (Taw. Mang.)

Tree to 20 ft. high with globose, yell., strongly scented flrs. Its powdery, cadaverous yellow bark is striking. An inhabitant of land subject to inundation. *Moore* s.n.

41. **A. sp.** = T. Honey 824 and J. Borle l.

Ngamiland. *Curson* 548.

42. **A. sp.** cfr. *A. macrothyrsa* Harms.

Shrub 8 ft. high with yell. spicate inflor. It resembles *A. galpinii* except in stature and habitat. Locally abundant N. of Nata. The roots are said to have a foetid smell. *Miller* B/489.

43. **A. sp.**

Tree to 50 ft high on "black turf" between Kasane and Kazungula. Flrs (Nov.—Dec.) globose, white with pale yell. anthers. Lvs. 8—9 cm. l.; pinnae 4—6 prs 3 cm. l.; lfts 12—17 prs, 5 mm. l., 1 mm. b. Pod falcate, like that of *A. karroo*. Very close to *A. usambarensis* Taub, and matching other un-named specs. at Kew. *Miller* B 1081, B/1083. B/1125. *Rob. & Elffers* 98, 103, 104.

44. **A. sp.**

Not matched at Kew. Tree 18 ft high, between Matetsi vill. and Kazuma Pan, Chobe. Pod (Sept.) somewhat like that of *A. grandicornuta*. *Miller* B/930.

AFZELIA Smith III

1. **A. quanzensis** Welw.

Pod Mahogany. Afzelia (Standard Name). muwande (Taw. & Sub.) mukamba (Sarwa)

Large tree of N.B.P. Pod (Apl) 12—15 cm. l., 3—4 cm. b., woody, seeds black with scarlet aril, much used as ornament. Flrs Oct. Yields a good timber. *Miller* B/8, B/64.

ALBIZZIA Durazz. I

Unarmed trees or shrubs. Pods with thin valves, seeds on long funicles. In some spp. the lvs. are like those of the feathery-ly'd. acacias.

1. **A. anthelmintica** A. Brongn. var. **pubescens** Burtt Davy
monoga (gen.) uchundwe (Sub.)

Small tree to 16 ft. high. Flrs (Aug.—Oct.) precocious, white with green anthers, conspicuous. Bark blackish, young bark lenticular. S. limit of range from Artesia to Sekwane on Limpopo Riv. *Mrs Lugard* 15. *Miller* B/24, B/51. *van Son* H28883.

2. **A. antunesiana** Harms

Small tree with lvs. large for this genus. Only one tree seen, at Komani on Ngwezumba str., Chobe. *Miller* B/188.

3. **A. harveyi** Fourn. (syn. *A. hypoleuca* Oliv.)
molalagakga (G.N.P.) = resting place of guinea-fowl.

This and no. 5 are much alike in their feathery lvs. Pod to 13 cm. l., 3 cm. b. *McCabe* collected the type in Ngamiland. *Curson* 25, 84. *Mrs Lugard* 32. *Miller* B/258, B/413. *Pole Evans* 4089, 4101.

4. **A. rhodesica** Burtt Davy
sipumbula ma tako (Sub.)

Tree to 30 ft high. Bark peels off in broad, thin, paper-like sheets. Inflor. (Sept.—Oct.) white with green tinge. Wood light, coarse grained, dirty white. *Miller* B/53, B/135.

5. **A. rogersii** Burtt Davy
mmola (Mang.) molalagakga (Taw.)

Tree to 35 ft high. Flrs (Oct.—Nov.) creamy white. Chobe and Tati. *Grant* 9. *Miller* B/1100.

6. **A. struthiofolia** Milne-Redhead
mmola, molalagakga (G.N.P.) moarungarunga (Mbuk.)

Tree of Ngamiland & Chobe. Much like no. 3. *Miller* B/69, B/197.

7. **A. versicolor** Welw.

mokobongo and motshwarakgane (Taw.) link o (Sub.) mokongotshi (Mbuk. kakomo (Kob.)

Tree to 35 ft high of Chobe & Ngamiland. Flrs (Oct.) white with green tinge. Wood used for furniture and bark for soap. *Miller* B/56, B/335.

AMBLYGONOCARPUS Harms I

1. **A. obtusangulus** Harms

Scotsman's Rattle. mbaimbai (G.N.P.)

Large tree yielding useful timber. Pod glossy, 4-sided, woody, chestnut brown. The dried fruit rattles. Flrs (Oct.) racemose. Lfts ovate. There is a fine specimen on Victoria Falls railway station. *Miller* B/581. *van Son* H28884.

BAIKIAEA Benth. II

1. **B. plurijuga** Harms

Rhodesian Teak, the Standard, but unfortunate name. Zambesi Redwood. mokusi (G.N.P.) ukusi (Mbuk.)

Tree with dark foliage. Flrs (Dec.—Mch) conspicuous, erect, magenta. Pod woody, erect, velvety, opening explosively. Bark rough, red-brown on old; smooth, blue-grey on young wood. The most important of our timber trees; yields sleepers, parquet, etc. Only found on Kalahari sand. *Curson*. *Miller* B/1, B/2. *Pole Evans* 4162. *Rob. & Elffers* 63.

BAPHIA Afzel III

1. **B. obovata** Schinz

isunde (gen.) sentsho (*teste* Curson).

Bushy shrub of Baikiaea forest, 4 ft high. Lvs. simple, altern. Flrs (Nov.) white with yell. dot at base of standard. Pod woody, twisted on drying. *Curson* 176. *Miller* B/7, B/59, B/75. *Pole Evans* 4072, 4165. *van Son* H28885.

BAUHINIA Plum. II

Trees and shrubs with lvs. which are either deeply lobed or of 1 pr of lfts connate at base.

1. **B. fassogiensis** Klotz. (syn. *B. bainesii* Schinz)

Woody climber with yell. flrs. *Baines* at Lehututu, Kalahari.

2. **B. macracantha** Oliv.

mupondopondo (G.N.P.) motwakidja (Kwena) mochope (Mbuk.) mokoshi (Ngwak.) motsope (Sub.) motshanja (Mang.)

Common shrub in Baikiaea forest, occurring sparingly and very locally in S.B.P. The type was collected nr Lake Ngami by *McCabe*. Flrs (Sept.—Nov. and Feb.—Mch) large, white with pale yell. anthers. Some plants have tendrilled brchls. *Curson* 185, 211. *Erens* 222, 364.

Lugard 144. *Mrs Lugard* 189. *Miller* B/74. *Pole Evans* 4023, 4166. *Rogers* 6876. *van Son* H28887, H28890.

3. **B. urbaniana** Schinz

mupondopondo (G.N.P.) mo'shanja (Taw.)

Shrub 3 ft high in Baikiaea forest. Much like no. 2 but flrs (June) smaller and may be white, pale or deep pink on same plant. *Miller* B/421, B/1032.

BOLUSANTHUS Harms III

1. **B. speciosus** Harms

S. African Wisteria. nsukungaphala (Mang.) nsungamola (Kalaka) motsokophala (Mang.)

The only sp. Small tree with handsome racemose, violet coloured inflor. (Sept.) Lvs. pinnate, lfts widely spaced, sharply pointed. Frts finely reticulate over seeds. Common in Tati, occasional in Chobe. *Grant* 2. *Miller* B/920.

BRACHYSTEGIA Bth. II

A difficult genus in which much confusion exists.

1. **B. boehmii** Taub. (syn. *B. filiformis* Hutch. & B. Davy)

muvombo

Tree to 40 ft high in Baikiaea forest. Found also by van Son at Nkate, Makarikari. Lfts contiguous, linear $\pm$ 25 mm. l. *Miller* B/145. *van Son* H28878.

2. **B. sp.**

Collected west of Kachekau. *Pole Evans*. 4637.

3. **B. sp.**

Collected in Ngamiland, without precise locality. *Curson* 364.

BURKEA Bth. II

1. **B. africana** Hook.

monato (G.S.P.) mosheshe (Taw.) mkalati (Kal.)

The only sp. Common tree to 30 ft high and 20 ins. d.b.h. Flrs (Oct.) pale yell. on spike to 8 ins. l. Pods (Feb. onwards) thin, 1—2 seeded. Brehlts swollen, with red tomentum. A useful wood for felloes, parquet, etc. Hab. sandy soils. *Hillary & Rob.* 498. *Miller* B/77.

CASSIA L. II

Most spp. are herbs.

1. **C. abbreviata** Oliv. var. **granitica** Baker f.

mokwankusha and sifonkola (Kol.) monepenepe (Mang.) nshashanyana and nlembelembe (Kalanga, *teste* Matthews)

Tree 20 ft high. Flrs (Sept.) bright yell., precocious. Pod narrow, cylindrical, over a foot long. E. Chobe, Ngwato and Tati dists. *Miller* B/39, B/125. *Rob. & Elffers* 90.

COLOPHOSPERMA Kirk II

1. **C. mopane** (Kirk) J. Leonard (syn. *Copaifera mopane* Kirk)
mophane (gen.)

Tree to 30 ft high. Frts flat, thin, nautilus-like in outline. Lvs. of 1 pr of lfts, dark. Wood hard, heavy, resinous, durable, makes a good mining prop and fair charcoal. S. limit of range 16 mis. N. of Mahalapye. Gregarious, on stiff soils. Large areas have been reduced to coppice by fire and continually cut back by frosts. Some trees yield a good fibre from the bark while others quite useless for this. *Curson* 28. *Lugard* 243. *Mrs Lugard* 296. *Mally* s. n. *Marloth* 3326. *Miller* B 113. *Pole Evans* 3219, 4003.

CROTALARIA L.

Pods inflated. Flrs racemose. Lvs. 3-foliolate.

1. **C. lotoides** Bth.

Woody plant 9 ins. high. Flrs (Jany) yell. Frts Jany. Pharing. *Miller* B/831, B/832.

2. **C. polysepala** Harr.

Woody plant 2—3 ft high. Flrs (June) bright yell. Frts 10cm. l., hairy. *Miller* B/1052.

DALBERGIA L. III

1. **D. melanoxydon** Guill. & Perr.

African Blackwood (Standard Name). makelete (G.N.P.)

Small tree, seldom large enough for timber, which is black with bright yell. sapwood. Lvs. pinnate, the lfts small and widely spaced. Brchlts spinose. Flrs (Dec.) white. *Miller* B/886, B/1132. *Pole Evans* 3238.

DIALIUM L. II

1. **D. simii** Phillips

mohamani (G.N.P.), usimba (Mbuk.)

Tree of 20 ft high of Baikiaea forest. Lvs. pinnate. Frt. 1-seeded. *Miller* B/645.

DICHROSTACHYS Wight & Arn. I

Shrubs or small trees. Acacia-like, but spineless, the brchlts being spinose.

1 **D. arborea** N.E. Br.

Tree 10 ft high of Ngamiland. Lvs. shorter than in nos. 1 and 2. Curson 230. Holub. Lugard 27 type.

2. **D. glomerata** Hutch. & Dalz. (syn. *D. lugardae* N. E. Br. & *D. nutans* Bth.)

moselesele (gen.) keye (Sub.)

To 12 ft high. Lvs. altern., lfts small, feathery. Flrs (Dec.—Feby.) conspicuous with pink stamens and mauve, turning white, staminodes. Frts twisted, bunched. Sir Harold Glover in *Empire Forestry Review*, Vol. 30, no. 3, writing of Cuba, says "many of the pastures have been overgrazed and this has been followed by the invasion of the marabou thorn (*Dichrostachys nutans*) an African species, which forms impenetrable thickets. It is spread by cattle voiding the seeds, and in 1945 was calculated to have covered 919,000 acres of agricultural and pastoral land. Research in insecticides, etc., has failed to discover anything which destroys it." Though in the B.P. it forms thickets, they are seldom impenetrable or of great size. Lugard 42. Mrs Lugard 78. Hillary & Rob. 532. McCabe. Miller B/87, B/789, B/790. Rob & Elffers 86. van Son H28862.

ELEPHANTORRHIZA Bth. I

1. **E. burkei** Bth.

mositsane (gen.) namba (Sarwa)

Tree 8 ft high. Pod about 18 cm. l. (one was measured 28 cm. l.) distinctly margined, thin; seeds closely packed with flattened ends. Flrs (Sept.) spicate, white turning yell. Bark black. Plant is sometimes completely defoliated by caterpillars of a Pyrolid moth. Miller B/221, B/562.

2. **E. elephantina** Skeels

mositsane (gen.)

Lvs. and yell. racemose inflor. borne on brchls 5 ins. long emerging from an underground stem said to reach 30 ft long, yielding a good tannin. Flrs, Sept. Miller B/482, B/517.

3. **E. sp.** cfr *E. fruticosa* Schinz (Kew dé.)

namba (Sarwa)

Shrub 3 ft high nr Matetsi vill., Chobe. Flrs (Sept.) precocious, yell. Miller B/925A.

ENTADA Adans. I

1. **E. nana** var. **pubescens** R. E. Fries

Low shrub of Baikiaea forest. Pods very broad. Flrs in slender spikes. Lvs. like those of *Burkea africana*. Miller B/185.

ERYTHRINA L. II

Trees with 3-foliolate lvs. Pods moniliform.

1. ***E. caffra*** Thbg

Coral Tree. Kaffir Boom. mophete (G.S.P.)

Small tree with large coral coloured flrs, irreg. July—Oct. Seeds are small red "lucky" beans. *Hillary & Rob.* 570. *Miller B* 662.

2. ***E. sp.*** nr *E. latissima* *E. Mey* & *E. gibbsae* Bak. f.

mofhupe, mophete *teste* Ellenburger. monabete *teste* Grant.

Tree over 20 ft high and over 4 ft diam. Branches densely covered with spines. Flrs (Oct.—Nov.) dull crimson. Pod with 1—2 seeds, deeply constricted, thick, woody. Spec. is being examined at Kew and may be a new sp. Only 1 adult and 4 young trees known. These are 4 mis. from Mswazi's old kraal in Bakalaka country, E. Ngwato dist. *Delorme* H584, H828. *Ellenberger* H512.

ERYTHROPHLOEUM Afzel II1. ***E. africanum*** (Welw.) Harms

mobako (Taw.) ununza (Sub.) mupombo and mukonkotsi (Mbuk.)

Small tree of Baikiaea forest. Lvs. pinnate, altern. Pod flat, coriaceous. *Erens* 415. *Miller. Pole Evans* 4208, 4625, 2768.

GUIBOURTIA (J. J. Benn.) J. Leonard

1. ***G. coleosperma*** (Bth.) J. Leonard (syn. *Copaifera coleospermum* Bth.) Rhodesian Copalwood (Standard Name) motsaudi, munzauri (Kol.) tsaudi (Taw.) nsibi (Sub.) oshi (Mbuk.)

Tree to 35 ft high. Frts pulpy, edible. Lvs. with 1 pr lfts. Yields a handsome timber, fragrant when freshly cut. *Erens* 425. *Lugard* 244. *Miller. Pole Evans* 4612.

HOFFMANSEGGIA Cav. II1. ***H. rubra*** Engl.

"Thorny bush 5 ft high; flrs pink" (2) at Tklane Pits, Kalahari. *Lugard* 305.

INDIGOFERA L. III

Shrubs, shrublets and herbs clothed with appressed hairs fixed at the middle. Here with usually pinnately compound lvs. and red flrs. Frts sessile, transversely chambered.

1. ***I. circinnata*** Bth.

Recorded in B.P. (4). Usually with numerous spines. Pod curved in a complete circle.

2. **I. comosa** N. E. Br.

Pods 10—13 cm. l., dark brown, constricted over the seeds. Pharing. *Miller* B/548.

3. **I. cryptantha** (Harv.) Bth.

Shrublet 18 ins. high. Flrs Nov. Pharing. *Miller* B/784.

4. **I. daleoides** Bth.

Recorded from B.P. (4).

5. **I. flavicans** Bek.

The type was collected by Baines. 3-foliolate. *Holub* 1098. *Lugard* 146. *Mrs Lugard* 190. *Pole Evans* 4082, 4127. *van Son* H28906.

6. **I. macra** E. Mey.

Recorded from B.P. (4). 5—11 lfts.

7. **I. melanadenia** Bth.

morobe omtuna and mopanya (Ngwak.) *Miller* B/976.

8. **I. variabilis** N. E. Br.

Branches white. Lfts 1—5. Type gathered in the Kwebe Hills. *Hillary & Rob.* 540. *Lugard* 99. *Mrs Lugard* 119.

9. **I. sp.** = *Codd* 724. *Acocks* 12364.

Shrublet 18 ins. high. Flrs Apl. Pharing. *Miller* B/1021.

ISOBERLINIA Craib & Stapf

1. **I. globiflora** (Bth.) Hutch. ex Greenway
mutondo.

Tree 30 ft high in N.E. corner of B.P. Pod woody, tomentose, square at apex, with sharp beak. Lvs. of 5—6 prs lfts, widely spaced. Flrs (Aug.—Sept. and Jany.) pale yell, globose. Bark of roots used to make fish nets. *Miller* B/144.

LONCHOCARPUS H.B. & K.

Trees with lax, paniculate inflor.

1. **L. capassa** Rolfe

Rain Tree. mopororo (Taw.) mopanda (Kol.) mukololo (Sub.) upanda (Mbuk.) mohata (Mang.)

Tree to 40 ft high. Flrs (Sept.—Dec.) violet coloured on lax raceme. Lvs. large with 3—5 lfts to 10 cm. long. Pods thin, tapering at both ends about 7 cm. l. remaining for several months on tree. Bark whitish. Tree used for grain mortars and dugout canoes, Maun. It is somewhat frost-tender and does not occur S. of Ngwato dist. The tree is sometimes attacked by a sucking bug, hence its English name. *Curson* 166. *Miller* B/49. *Pole Evans* 4034. *Rob. & Elffers* 114. *van Son* H28891.

2. **L. nelsii** (Schinz) Heering & Grimmer

Appleleaf Tree. mopanda (Kol.) mmhara (Mang.) mwahata (Taw.) mukololo (Sub.)

A smaller tree than no. 1 with a shorter S. range. Flrs (Sept.) pink to purple, paniculate. Lvs. simple, apple tree-like. Bark flaky, yell. Wood makes good axe handles. Frts Oct. *Miller* B/47, B/57, B/90. *van Son* H28903.

3. **L. laxiflorus** Guill. & Perr.

Collected on the Old Hunters' Road. A tree of Nileland and Upper Guinea. *Pole Evans* 3328.

MIMOSA L. I1. **M. pigra**. L. (syn. *M. asperata* L.)

Sensitive Plant. pilubutuku (Taw.) mongywani (Kol.)

Thorny, lax shrub to 10 ft high, of river banks in N.B.P. Flrs (Sept.—Oct.) capitate, pinkish. Frts opening transversely between the seeds, bristly. Lf with prickles at base of each pr of pinnae and between each pr. *Curson* 52, 709, 734. *Miller* B/885, B/1105.

MUNDULEA Bth. III1. **M. sericea** A. Chev. (hom. *M. sericea* Greenway, syn. *M. suberosa* (DC.) Bth.)

mositlha ba tau (Mal.)

Shrub about 2½ ft high, in S.B.P. usually found on shallow soil above shale. Lvs pinnate with sharply pointed lfts, grey-white below. Flowers irregularly. Inflor. racemose, lilac-coloured, showy. In Ngwato dist. it is often a small tree 10 ft high and confused with *Bolusanthus*. Bark corky. *Hillary & Rob.* 555. *Lugard* 73, 302. *McCabe* 2, 43. *Miller* B/156.

ORMOCARPUM Beauv. III1. **O. trichocarpum** Taub.

At Tantebane, Tati. "Flrs blue, large, solitary or in prs. Lfts 11—17, very small" (2). *Pole Evans* 3235.

OSTRYODERRIS Dunn III1. **O. stuhlmannii** (Taub) Dunn

muzwamalowa (Sub.) muzamalowa (Kol.) mufamalowa.

Tree to 30 ft high and 20 ins. d.b.h. Bark rough, flaky, exuding a red juice when cut. Frt indehiscent with winged margin. Flrs (Oct.) white. Chobe & Tati dists. *Miller* B/1103. *van Son* H28886.

PARKINSONIA L. II1. **P. africana** Sond.

Shrub collected on our border by Gerstner near Rietfontein and

should be sought in B.P. "Flrs yell., petiole very short and ending in a spine. Main axis of lf very long, flattened, lf-like; lfts very small." (20)

PELTOPHORUM Vogel II

1. **P. africanum** Sond.

mosetlha (gen.) mosiru (Sub.) movevi (Mbuk.) nzeze (Kalaka)

The only sp. Tree to 35 ft high. Flrs (Nov.—Jany.) yell., conspicuous. Pods flat, pointed, 2-seeded, much liked by cattle and remain long on the tree. Said to yield a good turner's wood. *Curson* 121, 198. *Erens* 292. *Galpin* 7009. *Hillary & Rob.* 528. *Lugard* 241. *Miller* B/85, B/117.

PILIOSTIGMA Hochst. II

1. **P. thonningii** (Schum.) Milne-Redhead (syn. *Bauhinia thonningii*. Schum. *Bauhinia reticulata* Oliv.)

mutukutu (Sub.) musekese and mubaba (Kol.) mupapama (Mbuk.) nsekese (Kalaka.).

Tree of Chobe & Ngamiland. Flrs (Dec.—Jany.) white to pinkish. Pod 12—18 cm. l., 5—6 cm. b., woody. Lvs simple, coriaceous, with the appearance of 2 lfts. *Curson* 1018. *Miller* B/1289. *Pole Evans* 3329.

PSEUDOCADIA Harms III

1. **P. zambesiaca** (Baker) Harms

motha (Mang.)

Large, shady, evergreen tree of moist places from Sefare and Selika to Limpopo Riv. Flrs (Oct.) inconspicuous, greyish, racemose, strongly & pleasantly scented. Frts smooth, blue-grey, shining, somewhat globose with a distinct groove on one side. Wood hard, heavy, handsome. *Miller* B/465.

PTEROCARPUS L. III

Trees or shrubs with yell. flrs, winged frts and pinnate lvs.

1. **P. angolensis** DC.

Muninga (Standard Name) Bloodwood. mukwa, mokwa (G.N.P.) mulombe (Sub.) moowa (Mbuk.) morotomadi (Mang. *teste* Delorme)

A fine tree to 35 ft high and 24 ins. d.b.h. Bark, very thick, when cut exuding a red juice. Flrs (Oct.—Nov.) precocious. Frts with large circular winged margin $\pm$ 6 cm. diam., with a bristly boss over the seed. A fine furniture wood which gives a good peeler veneer. Not found south of Ngwato & Tati. *Curson* 975. *Miller* B/1157.

2. **P. martinii** Dunkley

modianzovu (G.N.P.)

Small tree or shrub of Baikiaea forest. Flrs Aug.—Sept. Sap- and heart-wood pale straw coloured. *Miller B 146, B/148. Pole Evans 4156.*

3. **P. rotundifolius** (Sond.) Druce (syn. *P. sericeus* Bth.) mpanda (Kalaka)

“Tree 15—20 ft high; flrs orange-yell., sweetly scented”. (4). Ngami-land & Tati. *Curson 91. Miller B/1288. Pole Evans.*

4. **P. stevensonii** Burt Davy moangola (Kol.)

Small much branched tree only seen at Kazungula and Sidudu, dist. Chobe, on shallow soil over limestone. Wood light yell., making excellent waggon wheel felloes and axe handles. Frt as broad as long. 3 cm., flat. *Miller B/138, B/322, B/325.*

SCHOTIA Jacq. II Boer Bean

1. **S. transvaalensis** Rolfe

Large tree on banks of Limpopo Riv. from Martin's Drift north. Wood useful. Midrib of the pinnate lf is winged. Flrs not seen but probably deep red. *Miller B/368.*

SESBANIA Scop. III Plants of moist soils.

1. **S. aegyptiaca** Poir linyeli (Taw.)

Slender shrub to 11 ft high. Pod thin, terete, often twisted. Flrs (July) yell., streaked brown. Lvs. to 25 cm. l., lfts 2 cm. l. *Miller B/884, B/1062. Pole Evans 4169.*

SWARTZIA Schreb. III

1. **S. madagascariensis** Desv. moshakashela (Mbuk.)

Small tree of Baikiaea forest, Sitengu Pan and near Mohembu. Bark pale, stringy; this and the roots used medicinally on dogs and humans. Pod somewhat constricted over the seeds and like a long thin, black sausage. Lvs. of about 4 prs pinnae used to poison the bilharzia-carrying snail. *Miller B/422.*

TEPHROSIA Pers. III

1. **T. burchellii** Burt Davy

Shrublet 2 ft high, among rocks. Flrs (Jany) red to purple. Pod 3-seeded. *Miller B/979.*

2. **T. contorta** N. E. Br.

Lugard 132.

3. **T. polystachyoides** Bak. f.

Shrublet among rocks, Pharing. Flrs (Nov.) magenta. *Hillary & Rob.* 614. *Miller* B/782.

ERYTHROXYLACEAE

ERYTHROXYLUM P. Browne

nganganga

1. **E. sp.** (? sp. nov.)

Not matched at Kew or Nat. Herb. Tree 25 ft high with lax branches. Foliage sparse. Lvs. simple, light green, somewhat spatulate. Flrs (Dec.) inconspicuous. Frts (Apl.) small, pulpy. Kasane and Serondela. *Miller* B/825.

ZYGOPHYLLACEAE

BALANITES Del.

1. **B. aegyptiaca** Del. *var. angolensis* Welw.

Shrub in Mopane forest 80 miles N.E. of Maun. Brchls spinose. Frts crimson, pulpy, 28 mm. l. Lvs. of 2 lfts. "Living" bark, peeling green, smooth. *Miller* B/417.

RUTACEAE

HESPERETHUSA M. Roem

1. **H. villosa** Janaka (at present only an ms. name)

sapolanaga (Taw.) nzani (Sub.)

Many stemmed tree to 16 ft high. Flrs (Nov.) pale yell. Lvs. soft, slightly hairy with 3—4 prs lfts with clavate wing between each pr, densely dotted with oil glands. Brchls sharply spinose in prs above each lf. Bark on young wood, densely hairy; otherwise glabrous, black. Much used when available, as a hut pole. *Miller* B/1063, B/1110. *van Son* H28984.

SIMARUBACEAE

KIRKIA Oliv.

1. **K. acuminata** Oliv.

muzumina (Taw.) ivomena (Sub.) modumela (Mang.)

Tree to 40 ft high and 25 ins. d.b.h. with grey bark. Inflor. umbellate, with pale yell. or white flrs (Oct.—Nov.) Propagates easily from trunk-cuttings. Wood has lately been found to give a useful peeler veneer. *Curson* 113,431. *Miller* B/66, B/1108. *Pole Evans* 2590.

BURSERACEAE

COMMIPHORA Jacq.

Trees and shrubs with, generally, compound lvs. which fall early. The bark of many spp. is soft, peeling green and exudes resin or myrrh. Most spp. strike readily from large cuttings. The genus requires revision.

1. **C. betchuanica** Engl.

seroka and moroka.

Small tree in thorn scrub on Zambesi Riv. *Miller* B/62.

2. **C. edulis** Engl.

moroka, mokomoto.

Tree 40 ft high. Juice milky. Bark whitish. Lvs. pinnate, often variegated green and yell. Flrs (Oct.—Nov.) on raceme 13 cm. l. yell.—green. Frts. reddish, elliptical, edible (Jany.) *Miller* B/318, B/1193, B/1281.

3. **C. fischeri** Engl.

moroka (G.N.P.)

Small tree to 15 ft high or as undershrub in Baikiaea forest. Lvs. 3-foliate. Bark red-brown peeling green. Frts Apl. *Miller* B/4, B/12. *Pole Evans* 3233.

4. **C. glandulosa** Schinz

Tree 12 ft high, 10 ins. d.b.h. Flrs (Nov.) dull crimson. Lvs. simple, serrate. Brchls $\pm$ spinose. Bark grey, smooth, not peeling, exuding a grey-pink gum when punctured. Serondela. *Miller* B/1118.

5. **C. kwebensis** N. E. Br.

"Spineless, much branched shrub or small tree, 4—15 ft high. Lvs. 3-foliate or pinnately 3-foliate. Flrs (Dec.) precocious. Frts Feb." (2). *Lugard* 86 ype? *Mrs Lugard* 34 type?

6. **C. lugardae** N. E. Br.

"Thorny tree to 10 ft high; Flrs precocious. Exudes quantities of pink and white gum standing out in knobby balls. Brchls ending in spines. Lvs. simple or 3-foliate. Drupe globose, red when ripe". (2) Kwebe Hills. *Mrs Lugard* 23 type.

7. **C. marlothii** Engl.

mopapama (Mang.)

Tree 20 ft high. Bark peels in paper-like strips. 3 mis. S. of Topsisiding. *Miller* B/802.

8. **C. mollis** Engl.

Ngamiland. *Curson* 117, 792.

9. **C. pyracantha** Engl.

The common sp. of eastern S.B.P. Lvs. simple, much serrated. Brchls spinose. Bark green, smooth. *Miller* B/62, B/63.

10. **C. stolzii** Engl.

Ngamiland. *Curson* 120.

11. **C. welwitschii** Engl.

18 mis. N. of Mahalapye. *Pole Evans* 3202.

12. **C. sp.**

Allied to *C. edulis*. Tree 40 ft high. Lvs. variegated green and yell. Frts (Jany) red. Kazungula. *Miller* B/318.

13. **C. sp.** near *C. harveyi* Engl.

Small tree on Zambesi Riv. Flrs (Oct.) red. Bark green. *Miller* B/63.

14. **C. sp.** Near *C. stolzii*.

mhota. moisatuma (Taw.)

Tree 40 ft high, 38 ins. d.b.h. Lvs. compound, some variegated green and yell. Bark flaky, not peeling. Kasane and Sefare. *Miller* B/261.

15. **C. sp.**

moroka

Shrub 3 ft high near Borehole no. 3, C.D.C. ranch, Chobe. Flrs (Sept.) crimson. *Miller* B/931.

MELIACEAE

ENTANDROPHRAGMA C. DC.

1. **E. caudatum** Sprague

mopumena (G.N.P.) motlhokomoti (Tati dist.)

Large timber tree of Baikiaea forest and Tati dist. A true African mahogany. Lvs. pinnate, the lfts with yell. central axis. Inflor. (Sept.) precocious, green, racemose. Frts cigar-shaped, $\pm$ 8 cm. l. with winged seeds. Bark exfoliates in plate-like pieces. *Miller* B/1156. *Pole Evans* 3250. *van Son* H28967.

MELIA L.

1. **M. azedarach** L.

Bead Tree. S. African Syringa. morulana (Kwena) morulwana (Ngwak.) mosalaosi (Mal. & Kgat.)

A common introduced tree. Flrs lilac-coloured. Frts globose, said to be poisonous to cattle.

PTAEROXYLON E. & Z.

1. **P. obliquum** (Thbg) Radlk. (syn. *P. utile* E. & Z.)

Sneezewood. tati ? (The Zulu name is um-tati and this name may have been bestowed on Tati dist. when invaded by the Matabele impis when, surprisingly, they found the tree so far from their native Zululand.)

Here a small tree seldom large enough for fence poles for which it is commonly used, being very decay resistant. It is however, owing to its essential oil, very inflammable. Lvs. pinnate, strong smelling when bruised. Seeds winged. Tantabani Farm, Tati. *Miller* B/607. *Pole Evans* 3264, 3237.

TRICHILIA L.

1. **T. emetica** Vahl (syn. *T. dregei* Mey.)
mosikiri (G.N.P.) isikiri (Sub.)

Large umbrageous tree. Bark black-brown. Flrs (July—Oct.) creamy white, waxy, sweet smelling. Frts (Dec.—Jany) like a small domestic fig with 2—4 red and black seeds yielding a useful emollient oil which only the Mwambukushi consider edible. Lvs. imparipinnate to 13 ins. l. with 3—5 prs lfts. Wood pink-white, light and easily worked but very prone to attack of wood borers. Hab. moist places, where it is evergreen. A tree with very thin lfts was found at Gomare on the W. side of Okovango Delta, where it was called mochanja. *Curson* 49. 436. *Miller* B/45, B/1070.

TURRAEA L.

Plants with simple, entire lvs. Frts globose.

1. **T. nilotica** Kotschy & Peyr.

Tree to 20 ft high and 8 ins. d.b.h. Bark smooth, pale. Flrs (May—Aug.) white to cream, petals long, curved into a circle. Frts (Aug.—Oct.) 10-celled. Occasional at Serondela, away from the sand sheet. *Miller* B/1042, B/1071. *Pole Evans* 4172. *Rob. & Elffers* 65. *van Son* H28944.

2. **T. obtusifolia** Hochst. var. **microphylla** DC.

Shrub to 4 ft high. Flrs (Dec.—Feb.) white, conspicuous, with long corolla tube. Frts (Mch—Aug.) globose, crimson 1 cm. diam. Lvs. often verticillate. Pharing. *Miller* B/615.

3. **T. zambesica** Sprague & Hutch.

motulu (Kol.)

Tree 12 ft high in thorn scrub near Zambesi Riv. Flrs June. *Miller* B/140.

MALPIGHACEAE

SPHEDAMNOCARPUS Planch.

Climbing plants with pink-green, winged frts and opp., simple lvs.

1. **S. galphimiaefolius** (Juss.) Szyszyl. (includes *S. transvaalica* (O. Ktze) Burtt Davy)

Flrs (Jany) canary-yell. Hab. rocky ground. Pharing. *Miller* B/977.

2. **S. pruriens** Planch.

makgonatshotlhe (Ngwak.) chipi emagale

Boiled roots used for stomach disorders. *Lugard* 291. *Miller* B/282, B/837. *van Son* H28943.

TRIASPIS Burch.

1. **T. hypericoides** Burch. var. **subsessilis** Burt Davy

"Scrub bush growing to 5 ft high. Flrs pinkish-purple. Frt with brown wings". (2) According to (4), probably collected on way to the Tati Goldfields. *Lugard* 304 type.

POLYGALACEAE

SECURIDACA L.

1. **S. longipedunculata** Fres.

Violet Tree. mmaba (gen.) mofufu (Sub.)

Tree to 20 ft high. Bark pale, smooth, the boles of old trees deeply channelled. Frts (Jany—July) bright yell., winged, 3 cm. l. Flrs appear irregularly, Oct. to Feby, violet to rose or variegated with white, conspicuous, strongly and sweetly scented. Wood white with concentric rings of soft tissue. Roots used for malarial fever. The tree yields the well known Buazi fibre but not used in B.P. In N. Rhodesia oil expressed from the flrs and sent to the Imperial Institute was well reported on. S. limit of range Kanye to Ootsi. *Hillary & Rob.* 493, 552. *Miller* B/142, B/150.

DICHAPETALACEAE

DICHAPETALUM Thouars

1. **D. cymosum** (Hook.) Engl.

mogau (gen.)

Twigs grow from a woody underground stem. Lvs. simple, altern., erect. Flrs white, fragrant. The plant is very poisonous to cattle. *Miller* B/394.

EUPHORBIACEAE

ACALYPHA L.

Herbs, shrubs or small trees with simple nettle-like lvs. Flrs spicate.

1. **A. glabrata** Thbg var. **pilosior** (O. Ktze) Prain

moharatsweni (Ngwak.)

Shrub to 9 ft high. Lf-stalk 1 in. long, stipules lf-like. Flrs (Dec.—Feb.) on spikes 1—2 cm. l. Frts (Mch.) minute. Hab. moister spots. Pharing. *Hillary & Rob.* 462. *Miller* B/274.

2. **A. grantii** Bak. & Hutch.

Small tree 9 ft high, 3 ins. d.b.h. Flrs (Dec.) Lvs. larger than no. 1. Serondela *Miller* B/1135.

3. **A. ornata** Hochst. Shrub 4 ft high. Serondela. *Miller* B/1275.**ANTIDESMA** (L.) Tul.1. **A. venosum** Tul.

simai and motoya (Kol.) muxuwa (Sarwa) rongwe, moingwe.

Tree to 25 ft. high. Lvs. simple, altern., entire. Inflor. often galled to resemble a bunch of grapes. Frts edible. *Miller* B/21, B/888. *Rob. & Elffers* 97. *van Son* H28832.

BRIDELIA Willd.

Trees or shrubs with simple altern., entire lvs.

1. **B. cathartica** Bertol. f.

Shrub of N.B.P. Flrs Oct.—Nov. Frts Apl. Easily confused with *Phyllanthus reticulatus*, *q.v.* *Miller* B/120, B/889. *Pole Evans* 4177.

2. **B. fischeri** Pax

munyinyinka (Kol.)

Shrub to 10 ft high nr Zambesi Riv. Flrs (Mch) pale yell. *Miller* B/130.

3. **B. mollis** Hutch.

mokokokwenana (Kwena), mokokonana (Ngwak.), motakwabula (Sub.) mokokole (Mal.) mokamanawe (Taw.) mokokwele (Kgat.) nkumbankumba (Kalaka)

Common shrub, occasionally a tree to 20 ft high. Lvs. simple, distinctly veined. Flrs (Dec.) sessile, green-yell. with cream-coloured anthers. Frts Apl—Sept. *Miller* B 267, B 870, B 966. *Pole Evans* 3263.

4. **B. niedenzui** Gehrm.

Much like no. 1. Near Zambesi Riv. *Miller* B/195.

CEPHALOCROTON Hochst.

Shrubs with altern. lvs. and terminal fir spikes. In the 2 spp. below, the lvs. are almost sessile.

1. **C. mollis** Kl. *var. pilosa* Schinz

"Shrub 4 ft high. Perianth green, stamens and stigma yell." (2). Kwebe Hills. *Mrs Lugard* 70.

2. **C. peschuellii** Pax

Formerly considered a var. of no. 1. *Lugard* 51. *Miller* B/1013.

CROTON L.

Trees and shrubs with simple lvs. with pr of glands at base of lf-blade. Frts somewhat pear shaped with a 3-pronged, grapnel-like process at apex. Nos. 2, 5, 6, and 7 may be conspecific. The wood of these is white, strong, durable, much used for hut building, and surrounding kraals.

1. **C. amabilis** Muell. Arg.

Shrub with yell.-green lvs. in Kwebe Hills. "Lvs. dull, dark brown above, to 6 ins. l." (Hutch. in F.T.A.) *Lugard* 33. *Mrs Lugard* 35.

2. **C. gratissimus** Burch.

moologa (gen.)

Shrub or small tree. Inflor. (Oct.—Nov. May) a raceme of up to 33 flrs, gold-coloured. Lvs. lanceolate, $\pm$ 5 cm. l., green above, grey-white, silvery below with numerous red dots. Bark of lower stem corky. According to Burt Davy (4) the lvs. are quite glabrous above; but see nos. 5 and 6. *Hillary & Rob.* 505. *Miller* B/589, B/591, B/598. *Schotland* 1614.

3. **C. megalobotrys** Muell. Arg. (syn. *C. gubouga* S. Moore)

motsibi (Taw. & Mang.) mutukatuka (Sub.) pokudza (Kgat.) mubwiti (Kol.)

Tree to 30 ft high. S. limit of range 4 mis. N. of Mochudi. Flrs (Oct.—Dec.) racemose, perianth green, stamens gold-yell. Frts $\pm$ 3 cm. l. (Nov.—Dec.). Lvs. nettle-like, $\pm$ 7 cm. l. Young bark lenticular. Wood white, useful. *Lugard* 17. *Miller* B/61, B/65, B/92. *Pole Evans* 4000, 4001, 4179.

4. **C. menyhartii** Pax (syn. *C. kwebensis* N. E. Br.)

"Much branched shrub to 6 ft high" (2), nr Lake Ngami and Kwebe Hills. *Curson* 335. *Lugard* 34. *Mrs Lugard* 41. *Pole Evans* 4095.

5. **C. subgratissimus** Prain (syn. *C. gratissimus* Prain)

moologa (gen.)

Nos. 2 and 5 grow together in many hundreds at Pharing and are indistinguishable save for the stellate puberulence on the upper surface of no. 5's lvs. As the 2 spp. occupy the same station, have the same flowering periods and lvs. may be found in every intermediate state from glabrous to stellate puberulent, the validity of two separate spp. is doubtful. See *Hillary & Robertson* 505, Also *Miller* B/251 gathered at Sefare and named *C. subgratissimus*, but "lvs. large for this group". See nos. 6 & 7. *Curson* 536, 796. *Fleck.* *Miller* B/590, B/592, B/599, B/626.

6. **C. zambesicus** Muell. Arg.

moologa (gen.) mokena (Kol.)

This tree of N.B.P., to 18 ft high and 13 ins. d.b.h. seems to be merely

a large leafed form, about 6.5 cm. l., of no. 2. It has the same flowering period, but the racemes of the northern plants are to 14 cm. l. and may bear up to 90 flrs and flr-buds. *Miller* B 80, B 639, B/1194, B/1195. *van Son* H28831.

7. **C. sp.** cfr. *C. zambesicus* (Kew)

Shrub on slope of Pharing, i.e. near the locality mentioned in no. 5. *Miller* B/880.

DALECHAMPIA L.

1. **D. capensis** Spreng
segope (Ngwak.)

Climber with woody stem. Flrs (Jany) with large green-yell., hop-like bracts. Lvs. digitate. Kanye Hill. *Hillary & Rob.* 500. *Miller* B 982.

ERYTHROCOCCA Bth.

1. **E. menyhartii** (Pax) Prain (syn. *Claoxylon virens* N. E. Br.)
tobega.

Shrub to 6 ft high, Kanye to Ngamiland, but nowhere common. Flrs (Aug.—Nov.) very small, yell.-green. Frts (Jany) small, globose, scarlet. Lvs. simple, soft, deep green. *Lugard* 53, 94. *Mrs Lugard* 51. *Miller* B/158, B/159, B/214.

EUPHORBIA L.

Tree euphorbias are unaccountably rare in B.P. Juice milky.

1. **E. monteiri** Hook. f.

"Erect succulent perennial with stem to 1 ft, high branching out into annual green stalks. Flrs maroon". (2) Totin. Ngamiland. *Lugard* 247. *Mrs Lugard* 87.

2. **E. sp.** near *E. quadrialata* Pax
mogo (Taw.) ngoga (Mang.)

An aphyllous tree 30 ft high near Zambesi Riv. The stem is 4-angled. *Miller* B/198.

FLUGGEA Willd.

1. **F. virosa** (syn. *F. microcarpa* Blume)

A bushy, dioecious shrub to 8 ft high. Lvs. simple, entire. Flrs Dec. Frts (Jany) small, globose, whitish. *Curson* 790. *Hillary & Rob.* 568. *Miller* B/101, B/102, B 110, B 1054.

PHYLLANTHUS L.

Many stemmed shrubs with simple altern. lvs.

1. **P. maderasapatensis** L.

S. of Lake Ngami. *van Son* H28837.

2. **P. reticulatus** Poir. (syn. *P. burchellii* Muell. Arg.)

Shrub of Chobe & Maun 8 ft high. *Miller* B/890. *Rob. & Elffers* 50. *van Son* H28834, H28836.

PSEUDOLACHNOSTYLIS Pax

Trees with simple, fresh-green entire lvs. The 3 spp. are much alike.

1. **P. dekindtii** Pax

mukungu (Kol.) mukunyambambi (Mbuk.)

Tree 40 ft high in Baikiaea forest, Mohembo, Ngamiland. *Miller* B/423.

2. **P. glauca** Hutch.

Small tree at Sefare, Ngwato, its probable S. limit of range. *Miller* B/253.

3. **P. maprounaefolia** Pax

mokonu (G.N.P.) mukungu (Kol.) mukunyambambi (Mbuk.)

Tree very like no. 1. Lvs. 4—7.5 cm. l., shining. Chobe, Sefare and Palapye. *Miller* B/252. *Passarge* 90.

RICINODENDRON Muell. Arg.

1. **R. rautanenii** Schinz

Mugongo (Standard Name) mongongo (G.N.P.), mokongwa (Mang.)

Large tree to 45 ft high and 45 ins. d.b.h. Lvs. digitate. Bark pale yell. Frts globose, $\pm$ 3—4 cm. diam., much liked by natives and elephant; a valuable oil is expressed from the kernels. Wood light in weight & colour. Chobe to nr. Mahalapye. *Miller* B/136. *Pole Evans* 3314.

RICINUS L.

1. **R. communis** L.

Castor Oil Plant. mokure (G.S.P.) mono (Taw.)

Shrub 8—10 ft high. Frts spinose, used as an emollient and purgative. Introduced, now widespread. *Lugard* 1. *Pole Evans* 4059.

SPIROSTACHYS Sond.

1. **S. africana** Sond.

Tambooti (name among Europeans derived from the Nguni name umtomboti), morukuru (gen.), morekhure (Kgat.)

Tree to 40 ft high. Bark rough, black. Frts (Nov.) harbour an insect which causes them to be a "jumping bean"; seed years are infrequent. Inflor. (Sept.—Oct.), catkin-like, brown. Lvs. simple with shining glands at base of lf-blade, many become scarlet before falling. An excellent furniture wood in great demand, but in B.P. sacrificed to provide

hut poles and rafters. Occurs on Kalahari sand in copses of $\frac{1}{2}$ to 3 acres. in parts of Kwenä. Kgatla and Ngwato dists, and in belts along contour of hills in Kanye. Ootsi and Ngwato. It is reported from the isolated Aha Hill in W. Ngamiland. *Miller* B/153, B 656, B/719.

ANACARDIACEAE

HEERIA Meisn.

Plants with simple, conspicuously veined lvs.

1. **H. insignis** (Del.) O. Ktze

Mochudi. *Shantz* 427.

2. **H. paniculata** (Sond.) O. Ktze

monokane

Recorded from Morali Pasture Research Station.

3. **H. salicina** (Sond.) Burt Davy

monokane (general) nlungu (Kalaka)

Shrub or small tree. Frts (Dec.—Mch) black and white mottled, then black, shining. Flrs (Apl., Oct.—Jany) small, white. The plant yields a resin. *Hillary & Rob.* 519. *Miller* B 235.

LANNAEA A. Rich.

Trees or shrubs with pinnate lvs., green above, grey below.

1. **L. discolor** Engl.

mootswana (Ngwak.) mopyane (Kgat.) ngamba (Kalaka)

Tree 10 ft high. Lvs. altern. or verticillate, lfts opp. Inner bark gummy. Brchls swollen. Grows from truncheon cuttings. *Hillary & Rob.* 515. *Miller*.

2. **L. edulis** Engl.

peho (*teste* Curson)

Shrublet 1 ft high. Flrs and frts which are edible appear before the lvs., which are used medicinally. *Curson*. *Miller*.

RHUS L.

Trees & shrubs with 3-foliate lvs. Flrs green-yell. The frts hang in currant-like bunches and are eaten by native children. The genus requires revision, see Burt Davy (4) page 494.

1. **R. commiphoroides** Engl. & Gilg (syn. *R. kwebensis* N. E. Br.)

morupapiri (G.N.P.)

Tree 10 ft high with spinose brchls. Frts rounded. The common *Rhus* of N.B.P. *Mrs Lugard* 200. *Miller* B 122, B 131, B 133, B 186. *Pole Evans* 3290, 3291, 4033. *Rob. & Elffers* 78. *van Son* H28763.

2. **R. guenzii** Sond.

motshotlho (G.S.P.) nsasane (Kalaka)

Tree to 30 ft high. In mature trees the bchrlts, not spinose, are lax and persist after dying. Lvs. pale green are used as a decoction for bilious disorders. Flrs Apl.—June. Frts Apl.—July, glabrous, yell., hard, flattened. Wood red. *Miller* B/204. *van Son* H28761.

3. **R. lancea** L. f.

Karree Boom. mosilabele (G.S.P.) moshabela (Mal.) moshilabele (Tlokwa)

Common tree from Francistown S. Flrs May—July. Frts (July—Aug.) hard, glabrous, dark brown, flattened. Lvs. dark green, lfsts lanceolate. Hab. moister places. *Miller* B/203.

4. **R. magalismontanum** Sond.

mohudichane (Ngwak.)

Bushy shrublet 14 ins. high, often in clefts in rocks. Flrs Sept.—Nov. Frts (Nov.—Dec.) hard, glabrous, flattened. *Hillary & Rob.* 492. *Miller* B/778.

5. **R. pyroides** Burch. (includes *R. burchellii* (Engl.) Sond.)

mogodiri and mogwediri (Ngwak.) morupapiri (Taw.)

Small tree. Bchrlts usually spinose, red. Lfts with very fine hairs or glabrous. Flrs Oct. and Feby. Frts round. Widespread. *Curson* 357. *Miller* B/392, B/398.

var. gracilis (Engl.) Burt Davy

Pharing and Mahalapye. *Hillary & Rob.* 510, 573. *Rogers* 6714.

var. puberula Schonland

At Kabulabula, Chobe and Pharing. *Hillary & Rob.* 585. *van Son* 28762.

6. **R. sp.** near *R. pyroides*. = Flanagan 1405 in Nat. Herb.

Tree 12 ft high on bank Notwani Riv. Gaberones. *Miller* B/219.

7. **R. sp.** near *R. refracta* E. & Z.

morupapiri (Sub.)

Shrub 5 ft high in thorn scrub near Zambesi Riv. *Miller* B/186.

8. **R. (? sp. nov.)** near *R. undulata* Jacq.

Not matched at Kew. Tree branching at ground, to 18 ft high. Flrs July—Aug. On slopes above Pharing. *Miller* B/881, B/908.

9. **R. (? sp. nov.)**

Not matched at Kew. Shrub on termite mound near Pharing. Like *R. magalismontanum* but 4—6 ft high. *Miller* B/948.

10. **R. sp.**

Tree 8 ft high in Mokhorro vall. on Baratani Hill, dist. Gaberones.

Lf with slightly alate rachis. Lfts spatulate, glabrous, leathery. *Miller* B/561.

SCLEROCARYA Hochst.

1. **S. caffra** Sond.

morula (gen.) morwa (Koba) mfula (Kalaka)

The only sp. Tree to 35 ft high. Lvs. mostly confined to ends of branches, pinnate with opp., pointed lfts. — 4 cm. l., 2.5 cm. b. The pulpy fruits are eaten raw or made into a meal or beer. The kernel which unfortunately is difficult to deal with, contains a rich edible oil. Flrs (Dec.) pale yell. are said to be dioecious, but see Burt Davy (4) page 491. At Pharing also a tree which was carefully examined and found to only have male flrs. was felled and then produced a crop of fruits. The timber is soft, grey-white with a pink tinge, and used for carving, wooden platters, etc. Its S. limit of range is at Kanye. *Hillary & Rob.* 516. *Mrs Lugard* 38. *Miller* B/100, B/587, B/1119.

CELASTRACEAE

Trees and shrubs with simple, opp. or verticillate lvs.

CASSINE L.

1. **C. sp.**

monomani (Mang.) dikulukhazi (Mbuk.)

"This may be an undescribed sp. of *Pseudocassine*". *Nat. Herb.* Tree 12 ft high, much like *Pseudocassine transvaalensis* (Burt Davy) Bredell, *q. v.*, but has larger lvs and longer white fruits. Gathered on Metsimeseu stream, Serowe, where with the same native name, *Pseudocassine* also occurs. The wood is made into spoons. *Miller* B/225.

2. **C. sp.**

Shorobe, Ngamiland. *van Son* H28807.

ELAEODENDRON Jacq.

1. **E. capense** E. & Z. (syn. *Cassine papillosa* Hochst.)
nkonge (Kalaka)

Tree to 30 ft high. conspicuous in Sept. as being in full lf while all other trees deciduous. Bark grey, rather smooth. Flrs (Sept.) inconspicuous. Fruits (May) yellow, pulpy, 1 cm. l. Locally abundant 4 mis. S. of Tsessebe, dist. Tati. *Miller* B/919, B/1039.

GYMNOSPORA Wight & Arn.

1. **G. buxifolia** (L.) Szyszy.

mothono (Taw.) motlhono (G.S.P.) murowanyero (Mbuk.)

A very common, widespread shrub to 10 ft high. Brchls often spinose. Lvs very variable from 1 to 6.5 cm. l. Flrs (Feby. June—Oct.) very pale green to pure white, a profuse flowerer. Flrs here without smell; in Melssetter dist. they are particularly foul smelling. *Miller* B/625. B/915. *van Son* H28808.

2. ***G. ilicina*** Davison

Lax shrub 3 ft high on termite mounds or stream banks. Flrs (Nov.) pale yell. Lvs. holly-like, as broad as long, 16 mm. Frts (Feb.) small. Kgapung vall., Lobatsi and nr Mokobane. *Hillary & Rob.* 561. *Miller* B/642, B/766.

3. ***G. senegalensis*** Loes.

mothono (gen.) mukutema tembuze (Sub.)

A northern sp. with larger, greyer lvs than no. 1. Flrs May. Frts (Aug.) edible. Brchls somewhat spinose. *Miller* B/20, B/32, B/1131.

4. ***G. tenuispina*** Szysz.

mhewhere (G.S.P.)

Slender shrub inclined to form thickets about 3 ft high. Lvs. linear. Flrs (Dec.) axillary, on red pedicel. Frt (Dec.) a red, 3-cornered drupe, almost as broad as long, 6 mm. Brchls thinly spinose. Only seen in lower S.B.P. *Miller* B/544.

5. ***G. sp.*** nr *G. laurina* Bolus & Dod

Ngamiland. *Curson* 259, 263.

HIPPOCRATEACEAE

HIPPOCRATEA L.

Climbing shrubs with simple, opp., glabrous lvs. Brchls usually angled and prehensile.

1. ***H. loesneriana*** Hutch. & M. B. Moss

In Baikiaea forest. Flrs Mch. *Miller* B/128.

2. ***H. nitida*** Oliv.

Fringing forest, Chobe Riv. *Rob. & Elffers* 82.

3. ***H. obtusifolia***

Fringing forest, Chobe Riv. Lvs 7 cm. l., 2 cm. b. Frts like a 3-bladed propeller. *Curson* 917. *Erens* 257. *Miller* B/439. *Pole Evans* 4055, *van Son* H28849.

4. ***H. parvifolia***

"Climbing shrub with greyish bark. Flrs minute, green." (2) *Curson*

98. *Mrs Lugard* 180. *van Son* H29031.

5. ***H. sp.***

At Kasane. Not matched at Nat. Herb. *Pole Evans* 4203.

6. **H. sp.**

At Kazungula. Frt (Aug.) of 3 mericarps. Lfless in Aug. *Miller* B/27.

7. **H. sp.** At Kasane. *Pole Evans* 4617.**PSEUDOCASSINE** Bredell

1. **P. transvaalense** (Burt Davy) Bredell
monomani (Mang.) dikhulakazi (Mbuk.)

Tree much like no. 1 *Cassine* sp. *q. v.*, but smaller lvs and frts. The bark yields a tannin. *Miller* B/224, B/414.

SALVADORACEAE

SALVADORA Garcin

1. **S. persica** Garcin *var. pubescens* Brennan

The only sp. Said to yield the "mustard" of the Bible from the lvs, which are simple, opp., entire, succulent and evergreen. A gregarious shrub of N.B.P. in non-sand areas; about 6 ft high. Flrs (June—July) green, inconspicuous. "Frts edible" (20) *Miller* B/37, B/459. *Rob. & Elffers* 55.

SAPINDACEAE

ALLOPHYLUS L.

1. **A. holubii** Bak. f.

Collected on a termite mound in Lesuma vall., Chobe. *Holub*.

PAPPEA E. & Z.

1. **P. capensis** E. & Z. *var. radlkoferi* Schinz
mothata (gen.) mopennweng (Kgat. & Kwena)

Tree to 30 ft high. Bark grey. Lvs. simple. 6—8 cm. l., 4 cm. b., altern. or verticillate, entire or serrate on same tree, used for treating venereal disease. Frts (May—June & Aug.) edible, globose, red and fleshy inside the thin woody pericarp; the kernel contains a valuable oil. Inflor. (Jany) racemose, green-yell.; frs small. "Lobengula's Tree" at Government House, Bulawayo is this sp. *Miller* B/206.

RHAMNACEAE

BERCHEMIA Neck.

1. **B. discolor** (Klotzsch) Hemsl.
motsintila (Taw.) mozinzila. inzi (Sub.)

Tree of N.B.P. 30 ft high. Flrs (Nov.—Dec.) green-yell. Frts (March—May) yell., pulpy, are an important addition to native dietary. Lvs. simple, distinctly veined, 3—5 cm. l., 3 cm. b., glabrous (*Pole Evans* 4040 is a pubescent form), shining. Wood very hard, used in Ngamiland

to make tobacco pipes. *Curson* 275. *Mrs Lugard* 33. *Miller* B/95, B/126, B/1026.

HELINUS E. Mey.

1. **H. mystacinus** E. Mey.

"Dwarf shrub or creeper. Flrs green". (2) *Lugard* 187. *Mrs Lugard* 197.

MARLOTHIA Engl.

1. **M. spartoides** Engl.

The only sp. At Artesia. *Pole Evans* 3162.

RHAMNUS L.

1. **R. zeyheri** Sond.

Red Ivory. moye (Mal.)

Small tree of S.B.P. Lvs. simple, opp., veins distinct. Frts (Dec.—Apl) 1 cm. l., pulpy, yell. turning plum-coloured when ripe, much like those of *Berchemia*. Hab. rocky hillsides. *Miller* B/232.

ZIZYPHUS (Tourn.) L.

Trees with edible, red-brown, mealy frts. Lvs. simple, altern. with toothed margins. Spines in prs, 1 straight, 1 recurved.

1. **Z. abyssinica** (A. Rich.) Hochst.

Jujube Tree. mokgalo (gen.)

Small tree at Kazungula, much like no. 2, but lvs. with rusty pubescence on veins on undersurface. *Miller* B/115.

2. **Z. mucronata** Willd.

mokgalo (gen.) monganga (Kol.) moketekete (Mbuk.) n'she'sheni (Kalk)

Common tree to 30 ft high. Saplings and coppice make whipsticks; ox yokes cut from larger trees. Flrs (Dec.—Jany) yell. in clusters in lf axils. *Miller* B/109.

3. **Z. zeyheriana** Sond.

mokgalo (Ngwak.)

Shrublet 16 ins. high, gregarious on termite mounds. Lvs. smaller and more sharply toothed than no. 2. Flrs (Nov.) yell. Frts (Dec.) more globose and smaller than no. 2. *Hillary & Rob.* 632. *Miller* B/403, B/678. *Wilmot* 2.

VITACEAE

CISSUS L.

1. **C. fleckii** Schinz

Mabeleapudi Hills. *van Son* H29036.

2. **C. lonicerifolius** Smith

twee (Sarwa)

Shrub $2\frac{1}{2}$ ft high. Flrs (Sept.) yell., precocious. Matetsi village, Chobe. *Miller* B/927.

RHOICISSUS Planch.

Climbers with simple or 3-lobed lvs. Frts grape-like. mohurukwana (Ngwak.)

1. **R. cuneifolius** (L. f.) (E. & Z.) Planch.

Flrs Sept.—Apl. Frts Dec.—May. Specimen quoted below has also been named *R. cirriflora* (L. f.) Gilg & Brandt. *Miller* B/456.

2. **R. erythrodes** (Fres.) Planch.

Flrs Sept.—Mch. Frts Nov.—May. Lvs pubescent. *Hillary & Rob.* 495. *Miller* B/707, B/795.

TILIACEAE

CORCHORUS L.1. **C. pongolensis** Burt & Greenway

Shrublet 2 ft high. Lvs. simple, toothed, sticky. Flrs (Mch) yell. No native name obtained among about 60 Ngwaketsi; Ngwato name said to be seretwani. *Miller* B/307, B/621.

GREWIA L.

Small trees and shrubs with simple, altern. lvs. Flrs, except nos. 1 and 25 yell. with sepals as brightly coloured as and longer than the petals. Frts as broad as long, brown, 5—12 mm., 1—4 seeded. Bark easily stripped. In addition to the vernacular names given under individual spp., the following were also found indiscriminately applied:—mosapeteke, mhotswa, mankankele, marago aba humagade, chiriza (Sub.) mokomohana (Kal.)

1. **G. avellana** Heirn. (syn. *G. calycina* N. E. Br.)

Flrs (Dec.) white, sepals very long. Lvs. soft. Ngamiland to Kanye. *Lugard* 237. *Miller* B/531. *Schoenfelder* S. 266.

2. **G. bicolor** Juss. (syn. *G. salvifolia* Heyne)

Kwebe Hills. *Lugard* 92B. *Mrs Lugard* 121.

3. **G. cordata** N. E. Br.

mogwana (gen.)

Lvs. usually with many tubercles, white tomentum and grey under-surface. *Mrs Lugard* 102 type. *Miller* B/715, B/716, B/867, B/868.

4. **G. flava** DC. (syn. *G. cana* Sond.)

morethletwa (gen.) morezwa (Kal.)

Common small shrub of S.B.P. Flrs Oct.—Feb. Frts edible, much

used to make a slightly alcoholic drink. *Hillary & Rob.* 511. *Miller* B/535, B/540. *van Son* H29029.

5. **G. flavescens** Juss.

Probably conspecific with *C. retinervis* q. v.

6. **G. grisea** N. E. Br. (syn. *G. miniata* Mast. ?)

mogwana

Lvs with grey undersurface. *Lugard* 54 type.

7. **G. inaequilatera** Garke

From Kabulubula, Chobe. Described as a tree 25 ft high with a 40 ft spread of crown and drooping twigs. *Miller* B/481 may be this sp., collected on the Okovango Delta. *van Son* H29027.

8. **G. kwebensis** N. E. Br.

Lvs. very large for this genus. *Curson.* *Lugard* 92 type. *van Son* H29028.

9. **G. monticola** Sond.

mogwana kgomo (Ngwak.) motuu (*teste Curson*)

Ngamiland to Kanye. Lvs. grey below. *Curson.* *Hillary & Rob.* 534. *Miller* B/601, B/715. *Rob. & Elffers* 73.

10. **G. occidentalis** L.

mogwana and, *teste Curson*, mokukutu and motswetsweyane.

See Thonner, plate 91. *Curson* 93, 132, 567.

11. **G. olukondae** Schinz

mokgompata

Shrub 6 ft high of N.B.P. Flrs (Dec.) yell. Lvs. green below. *Curson* 297, 458. *Miller* B/1270. *Pole Evans* 3222, 3164.

12. **G. pilosa** Lam. (*non* Auct.)

mapate *teste Curson*.

Ngamiland & Tati. *Curson* 297. *Mrs Lugard* 121. *Pole Evans* 3222.

13. **G. retinervis** Burret

mokgompata (Taw.) motsontsinjane and mokankele (Ngwak.)

Its angular stems used for shafts of throwing-spears. *Curson* 793, 1174. *Hillary & Rob.* 463. *Miller* B/114, B/866, B/1000. *Pole Evans* 3164, 3315.

14. **G. subspathulata** N. E. Br.

Kwebe Hills. "Branching shrub; white-grey undersurface to lvs. which distinguishes it from *G. pilosa*. *Lugard* 92A type.

15. **G. velutinissima** Dunkley

mokgompata, motuu (N.B.P.)

Flrs Dec. Lvs. 4 ins. $\times$ 2 ins. Frts large with a few long, stiff hairs. Near Gomare, Ngamiland. This spec. should be compared with authentic material of *G. kwebensis*. *Erens* 375. *Curson* 175, 251. *Miller* B/97, B/433.

16. *G. villosa* Willd.

"Very distinct, quite unlike any other sp." (4) Frts with stiff hairs. "Flrs russet or green" (2). Also collected at ruins of Livingstone's house at Kolobeng. *Lugard* 46. *Mrs Lugard* 108. *Miller* B 242. *Pole Evans* 3336.

17. *G. sp.*

Serondela, Chobe. This spec. may prove to be *G. miniata* Mast. *Rob. & Elffers* 61.

18. *G. sp.* (? sp. nov.)

Ngamiland & Nata Riv. *Curson* 820. *Pole Evans* 3292.

19. *G. sp.*

Collected at Khomo dia Tsaba, dist. Mochudi. "Possibly *G. woodiana* K. Schum." *Nat. Herb. Miller* B 475.

20. *G. sp.* near *G. rogersii* Burtt Davy
mogwana

Flrs (Dec.) yell. Lvs. grey below, 3 cm. l., 1.5 cm. b. Pharing. *Miller* B/540B.

21. *G. sp.* "*G. miniata* or *G. grisea*" Kew.

Miller B 869.

22. *G. sp.*

Nr Maun. Not matched. *Erens* 304.

23. *G. sp.*

At Khomo dia tsaba. Not matched. *Miller* B 476. B 474.

24. *G. sp.*

At Pharing. Not matched. *Miller* B 538.

25. *G. sp.* nr *G. inaequilatera* Garcke.

Lax shrub 4—5 ft high in fringing forest Chobe Riv. Flrs white: lvs. green below.

MALVACEAE

ABUTILON Gaertn.1. *A. fruticosum* G. & P.

"Erect perennial 2 ft high in Kwebe Hills" (2) *Mrs Lugard* 85.

2. *A. lugardii* Hochst. & Schinz

Kwebe Hills. "Plant 3—4 ft high. Lvs. and calyx very viscid, orange-yell." (2) *Lugard* 148. *Mrs Lugard* 171 type.

3. *A. sp.* cfr *A. austro-africanum* Hochst.

Shrub 3 ft high near Pharing. Flrs (Nov.) yell. *Miller* B/713.

CLENFUGOSIA Cav.

1. **C. digitata** Pers.

"Perennial to 1 ft high. Flrs yell. with deep red centre, having a fringe-like margin" (2) Lvs. palmatisect to base. Stem annual on a woody rhizome (4) *Mrs Lugard* 94.

GOSSYPIMUM L.

Wild Cotton. boboya (Kol.) sesetu (Taw.) Latter name is that of the Honey Guide which uses cotton to make its nest. Lax shrubs to 4 ft high or climbers.

1. **G. herbaceum** L.

Ngamiland. *Curson* 299.

var. **africanum** Hutch. & Goese (syn. *G. africanum* Watt and includes *G. transvaalense* Watt) *Miller* B/440, B/1057. *Pole Evans* 3311.

2. **G. obtusifolium** Boxb. var. **africanum** Watt

Ngamiland & Chobe. *Curson* 506. *Mrs Lugard* 198 type.

HIBISCUS L.

Plants with simple, altern., often slightly lobed lvs. Flrs change colour with age—yell. to wine-coloured, white to pink. Bark of most spp. yields cordage.

1. **H. caesius** Guerke

Thin stemmed plant 3 ft high. Flrs (Aug.) yell. with a maroon "eye". Ngamiland & Chobe. *Mrs Lugard* 118. *Miller* B/1078, B/1079. *Rob. & Elffers* 79.

2. **H. calyphyllus** Cav.

Shrub 8 ft high. Flrs (May) pale yell. with black-brown centre, 6 cm. l. *Hillary & Rob.* 507. *Miller* B/610.

3. **H. micranthus** L.

Shrub 4 ft high. Flrs irregularly Oct. to June, white to pink. Lvs. with glittering flecks. *Lugard* 38. *Mrs Lugard* 50. *Miller* B/513, B/609.

4. **H. platycalyx** Mast.

"Shrub 3—7 ft high; the only shrubby Hibiscus of the Kwebe Hills. Flrs yell. with chocolate-red centre." (2) *Lugard* 147. *Mrs Lugard* 59. *van Son* H28941.

5. **H. subreniformis** Burt Davy

motyiba kgomo (Kwena)

Slender shrub to 6 ft high. Flrs (Dec.) canary-yell. Lvs. with glittering flecks. *Holub.* *Miller* B/539.

PAVONIA L.

1. **P. sp.** nr *P. burchellii* (DC.) R. A. Dyer

Shrublet 2 ft high. Flrs (Nov.) dark yell. Lower lvs. shallowly 3—5-lobed. *Hillary & Rob.* 508, 606. *Miller* B/725.

SIDA L.

Lvs. 3 to 5-lobed or palmately divided.

1. **S. chrysantha** Ulbr.

Plant 6—8 ins. high. Sub-herbaceous from a woody rhizome. Flrs (Nov.) straw-coloured, turning dark on gathering. *Miller* B/794.

2. **S. cordifolia** L.

"Shrub 1½—2 ft high. Flrs pale yell." (2) *Lugard* 235. *Rob. & Elffers* 76. *van Son* H28928, H28935.

3. **S. rhombifolia** L.

Shrublet 1½ ft high. Frs (Apl) yell. Kgopung vall., Lobatsi and Kwebe Hills. *Lugard* 192. *Mrs Lugard* 167. *Miller* B/622.

4. **S. sp.** cfr *S. hoepfneri* Guerke and *H. dinteriana* Hochst. mherwane (Mang.)

Shrub 3½ ft high on Kanye Hill. Flrs (Nov.) yell. on long stalk. Lvs. glaucous. *Miller* B/704.

THESPESIA Corr.

Lvs. Hibiscus-like.

1. **T. garckeana** F. Hoff.

morajwa (Mang.) moneko (Kol.) ntogwenyane (Kalaka)

Tree 15 ft high. Flrs (Mch—Apl) red-purple, turning yell. Often confused with *T. rogersii*. Chobe & Serowe. *Miller* B/139, B/853.

2. **T. sp.**

"probably undescribed". Nat. Herb. Collected 25 mis. N. of Kachekau, Chobe. *Pole Evans* 4178.

BOMBACACEAE

ADANSONIA L.

1. **A. digitata** L.

Baobab. moana (Taw.) mobuyu (Kol.) dovuyu (Mbuk.) ibozu (Sub.)

Thick boled tree to 70 ft high and over 20 ft d.b.h. Lvs. digitate (juvenile and epicormic lvs simple). Flrs (Dec.) large, white. Frts large, boat-shaped, green-brown, yielding a pleasing acidulous drink. S. limit of range 3 mis. S. of Mahalapye. *Miller. van Son* H28767.

STERCULIACEAE

DOMBEYA Cav.

1. **D. rotundifolia** (Hochst.) Harv.

Plumblossom Tree. motubane (G.N.P.) molubane, molobare (Mal.) n'ogwinzane (Kalaka)

Tree to 25 ft high with conspicuous, precocious white flrs (Sept.) Lvs. simple, broad as long, rough. Wood used for waggon wheel spokes at Serowe. *Miller B/654.*

HERMANNIA L.

Lvs. simple, altern.

1. **H. tomentosa** Schinz

Plant 1 ft high. Flrs (Feb.) pinkish. Pharing. *Miller B/824.*

2. **H. viscosa** Hiern (syn. *H. nyassica* Bak.)

Okovango. "Bushy plant 4 ft high. Flrs pink." (2) *Lugard 236.*

MELHANIA Forsk.

1. **M. didyma** E. & Z.

Ngamiland. "Bush 3 ft high. Flrs yell." (2) *Mrs Lugard 123. van Son H29014.*

2. **M. rehmannii** Szysz.

Recorded from "Chue Spring, B.P." (4)

3. **M. sp.** cfr *M. acuminata* Mast.

Shrub 3 ft high. Stems lax, thin. Flrs (May) yell. Lvs. simple, altern. At Pharing. *Miller B/586.*

STERCULIA L.

Trees with smooth, red and slate or red and white bark. Lvs. simple, altern. with several points or lobes.

1. **S. rogersii** N. E. Br.

mokakata (Mang)

Tree 30 ft high. Frts (Dec.) in clusters of 4—5, globose, 2—2.5 cm. diam. Near Tpsi Siding. *Miller B/803.*

2. **S. tomentosa** Guill. & Perr.

mokokobuyu (Kol.) mopopoja (Sub.)

Common as a large tree on Chobe Riv. Frts boat-shaped, green, covered with small irritating sharp hairs. Flrs (Oct.—Nov.) yell. with red stripes. Fibre from bark used to make sleeping mats. *Miller B/943.*

WALTHERIA L.

1. **W. americana** L.

Shrub 2 ft high. Flrs (Apl) yell. in dense clusters. Lvs. simple, altern., serrate. *Curson 514. Lugard 142. Mrs Lugard 210.*

var. **indica** K. Schum.

Lax shrublet. Flrs (Apl) yell. "Possibly not indigenous". (4) *Curson* 564. *Miller* B/187, B/865.

OCHNACEAE

OCHNA Schreb.

Trees and shrubs with simple, altern. lvs.

1. **O. pretoriensis** Phillips
monyelenyele (gen.)

Shrub to 7 ft high. Bark rough. Lvs minutely serrate. Flrs and frts as in no. 2, but smaller. *Miller* B/82.

2. **O. pulchra** Hook f.
monyelenyele (gen.) mozwe (Mbuk.)

Tree to 20 ft high. Bark rough, but peeling off leaving a very smooth, shining, blue-grey, yell., or pinkish surface. Flrs (Oct.) precocious, yell., conspicuous. Frts conspicuous with enlarged red calyx on which the black seeds are set. usually only 1 or 2 mature. *Curson* 716. *Hillary & Rob.* 494. *Miller* B/239, B/277.

3. **O. sp.** near *O. pretoriensis* Phillips.
Pharing. *Hillary & Rob.* 476.

GUTTIFERAE

GARCINIA L.

1. **G. livingstonei** T. And.

motsaudi (Taw.) mokonkono (Kol.) mokononga and isika (Sab.)

Large evergreen river bank tree of N.B.P. Juice yell. Lvs. simple, entire, dark, opp. or verticillate. The brchls are usually about 5 ins. long and grow equidistantly in 3s or 4s. Frt red, edible. *Miller* B/68. *Pole Evans* 4038, 4126.

DIPTEROCARPACEAE

MONOTES A.DC.

1. **M. glaber** Sprague
mwangarara (Sub.)

Tree to 20 ft high. Lvs. simple, entire, altern. Frts 1-seeded, pale brown, leathery, conspicuous, with large persistent calyx. Only one tree seen, at Sitengu Pan in N.E. corner of N.B.P. *Miller* B/143.

ELATINACEAE

BERGIA L.

1. **B. decumbens** Planch.

latsani, lilani, makaikai, *teste* Curson.

This plant has been described as a small tree or shrub and also as an herbaceous climber. *Curson* 66, 242.

FLACOURTIACEAE

Lvs. simple, altern.

DOVYALIS E. Mey.

1. **D. rotundifolia** Harv.

Shrub 8 ft high. Lvs. leathery, ovate. Brchls spinose. Frts red, edible. Bank of Limpopo Riv. on farm Zanzibar, Tuli Block. *Miller* B/373.

FLACOURTIA Juss.

1. **F. hirtiuscula** Oliv.

Much branched shrub. "Frts edible, well flavoured", Kirk. At Kasane and Tati. *Pole Evans* 3234, 4215. *van Son* H28842.

2. **F. ramontchi** L'Herit.

motumbulwa (Taw.)

Tsessebe and Chobe. Young lvs. red, thin, ovate, shallowly crenate to entire. Brchls spinose. Frts large, black, shining, edible. See Thonner, plate 104. *Miller* B/1040.

HOMALIUM Jacq.

1. **H. rufescens** Bth.

mchiara and montsiara. *teste* Curson.

Ngamiland. *Curson* 521, 732.

PAROPSIA Nor.

1. **P. brazzeana** Baill.

mwangarara (Kol.). This name also given to *Monotes* glaber.

Shrub of eastern Chobe. Flrs (May & Sept.) yell. Lvs. thick, stiff, distinctly toothed. 5—7 cm. l. *Miller* B/151, B/929.

RAWSONIA Harv. & Sond.

1. **R. lucida** Harv. & Sond. ?

At Nokoneng, Ngamiland. Lf. spec. only. *Miller* B/429.

SCOLOPIA Schreb.

1. **S. mundii** Warb.

moretlhetle (Ngwak.)

Small spinose tree making a good hut pole. Lvs. with reddish mid-ribs. Flrs inconspicuous. Flrg periods peculiar; an observed tree in 1944

fld in July, in 1948 in Feby and in 1949 in Sept. It is difficult to distinguish between *S. mundii* and *S. zeyheri*. *Miller* B/338, B/339, B/648.

PASSIFLORACEAE

ADENIA Forsk.

1. **A. glauca** Schinz

mohubu (Ngwak.) hulwane (Kgat.) mochacha

Woody climber, with tendrils. Grows from a glaucous tube 10 ins. in diam. Lvs. digitate. Flrs (Dec.) yell. *Miller* B/508, B/530.

THYMELAEACEAE

LASIOSIPHON Fresen.

Shrubs and herbs with opp. or scattered, often appressed, simple lvs. Calyx tube long. Bark with tough fibre.

1. **L. burchellii** Meisn.

Shrub 3½ ft high. Flrs (July) many, fragrant, yell. Pharing. *Miller* B/603.

2. **L. polycephalus** H. H. W. Pearson

"Small virgate shrub 2 ft high with erect glaucous branches. Lvs. few, scattered ¼—½ ins. l, ½—1 line broad. Flrs yell. with a delicious scent" (2). On Botletle Riv. *Mrs Lugard* 4.

COMBRETACEAE

Trees, shrubs and climbers with exstipulate, entire lvs.

COMBRETUM L.

Lvs. opp., altern. or verticillate. Frts winged in 3—4 angles. Flrs racemose or capitate.

1. **C. apiculatum** Sond.

mohodiri-(gen.) kasinsi (Sub.) tsingi'tsi (Kalaka)

Tree to 18 ft high with hard, dark green, shining, apiculate lvs. Hab. in S.B.P. shallow, stony soils, especially ferruginous quartzite as between Ootsi and Ramoutsa, where it is gregarious. Flrs Oct.—Nov. Frts Apl. *Cardross Grant* 7. *Curson* 243. *Hillary & Rob.* 504. *Mrs Lugard* 25. *Miller* B/73, B/521. *Pole Evans* 3188, 3203. *van Son* H28826.

2. **C. celastroides** Welw.

Tree 10 ft high at Kazungula. Flrs (Dec.) yell. *Miller* B/104, B/105, B/106.

3. **C. coriaceum** Schinz

molubana (Sub.) modubana (Taw.) opupa (Mbuk.) morubana

Whitish barked tree to 35 ft high in Baikiaea forest of Chobe and Mohembo, Ngamiland. *Curson* 329. *Miller* B/178.

4. **C. eilkerianum** Schinz
Botletle Riv. "Tree 20 ft high. Flrs white-green. Frt flat, brown."
(2) *Lugard* 9.
5. **C. elaeagnoides** Klotzsch.
Shrub or small tree to 9 ft high in Baikiaea forest. Flrs (Nov.) white.
Miller B/89, B/111, B/1124.
6. **C. eylesii** Exell
Ngamiland. *Curson* 119.
7. **C. gazense** Swyn. & Bak. f.
molubana, modubana, morubana.
Tree to 30 ft high of Ngamiland. Bark pale, almost white. *Miller*
B/415.
8. **C. glomeruliflorum** Sond. var. **riparium** Burttt Davy
modubu noka (gen.)
Tree to 25 ft high on river banks. Bark pale brown. Frts small.
Inflor. capitate. *Miller* B/617.
9. **C. griseiflorum** S. Moore
Shrub 9 ft high in Baikiaea forest. Lvs smooth. Flrs (Nov.) racemose,
white. *Miller* B/111.
10. **C. hereroensis** Schinz
Ramoutsa & Debeeti. *Pole Evans* 3153, 3180.
11. **C. holosericeum** Sond.
modubatsipi (Ngwak.) molatswe, *teste* Curson.
Small tree with dark green, velvety lvs. Flrs (Sept.—Oct.) racemose,
yell. Frts (Mar.—Sept.) small. *Curson* 141. *Hillary & Rob.* 518. *Miller*
B/309, B/311, B/359, B/510.
12. **C. imberbe** Wawra var. **petersii** E. & D.
Leadwood. motswiri (gen.) muvimba (Sub.) mborambunga (Koba, *teste*
Chapman) nswiri and mgete (Kalaka)
Large tree with very heavy, hard, durable wood used for grain mor-
tars and palisades. Heartwood black contrasting with the pale yell.
sapwood. Burns to a very white ash. Brchls decussate, somewhat
spinose. Flrs Dec. Frts small. *Curson* 129. *Miller* B/96. *Pole Evans* 4015.
van Son H28823, H28824.
13. **C. kwebensis** N. E. Br.
Kwebe Hills. "Bush 10 ft high. Allied to *C. salvifolia* Heyne, but
readily distinguished by its longer lvs. and flrs and longer peduncles"
(2). *Lugard* 48 type.

14. **C. mechowiana** O. Hoff.

modubana (Taw.)

Tree 10 ft high. Flrs (Sept.) yell. *Curson* 811. *Miller* B/490. *Pole Evans* 4134.

15. **C. microphyllum** Klotzsch.

This is a vividly red flrd climber. See *C. zastrowii*.

16. **C. mossambicense** Engl. (syn. *C. trichopetalum* Engl. and *C. cataractarum* Diels)

motweketsane (Taw.) mochekesane, kankolo (Kol.)

Lax shrub 10 ft high, but occasionally with support, to nearly 40 ft. Flrs (Aug.—Oct.) white with red anthers, capitate, conspicuous, precocious. Frts (Oct.) while young and very pale green, conspicuous. *Lugard* 15. *Mrs Lugard* 10. *Miller* B/43, B/334. *Rob. & Elffers* 77. *Curson* 1069, 1109 may be this sp.

17. **C. pachycarpum** E. & G.

Sand dunes 73 mis. N.E. of Maun. *van Son* H28827.

18. **C. parvifolium** Dinter

Tree 8 ft high in Baikiaea forest near Zambesi Riv. Flrs collected in Aug. immature. *Miller* B/641.

19. **C. primigenum** Marloth & Engl.

At Ghansi. *Fleck* 418.

20. **C. rautanenii** Engl. & Diels

At Maun. *van Son* H28819.

21. **C. rhodesicum** Bak. f.

Tree 18 ft high of Chobe & Ngamiland. Flrs (Aug.—Oct.) racemose, pale yell., precocious. *Curson* 309. *Miller* B/33.

22. **C. schumannii** Engl.

mochiara (name also given to *Terminalia prunioides*)

Small bushy tree to 10 ft high, marginal to Baikiaea forest. Flrs Apl. *Miller* B/134.

23. **C. stevensonii** Exell

"Collected at foot of Goha Hills, Chobe. Lvs to over 5 ins. long, narrow, sometimes in whorls of 3." This plant has been given the name of "Puncture Bush". It is found in thickets over much of the C.D.C. Ranch, Chobe. The broken branchlets can puncture the heaviest lorry tyres. (21) *J. Erens* 354. *Pole Evans* 4599.

24. **C. suluense** Engl. & Diels

Collected at Tantabane Farm, Tati. Lvs softly downy. "Frt up to 4.5 cm. l." (4). *Pole Evans* 3236.

25. **C. ternifolium** Engl. & Diels

Close to *C. mossambicense*. Flrs Oct. *Miller* B/58. *Shantz* 429.

26. **C. transvaalense** Schinz

mokabi (gen.) *mokata* (Mang. & Kgat.) *mongave* (Mbuk.)

May be conspecific with *C. hereroense*. Probably our commonest sp. From a shrub to a tree 35 ft high and 2 ft d.b.h. with very thick bark. Flrs (Sept.—Oct.) Dry frts make a tea substitute and may be found all the year round. Lvs. not pubescent on either surface. *Curson* 107, 138. *Miller* B/161. *Rob. & Elffers* 104.

var. villosissimum Burt Davy

"adult lvs. mucronate, prominently reticulate and rusty pubescent beneath, thinly grey pubescent above" (4). Gaberones, Maun and "in the Hus Hills", Holub, about 1875. *Holub. Miller* B3310, B/573, B3574. *van Son* H28821, H28833.

27. **C. truncatum** Welw.

At Toting, Ngamiland. "Tree 25—30 ft high. Flrs green, sweetly scented" (2) *Lugard* 29. *Mrs Lugard* 72.

28. **C. ukambensis** Engl.

On Okovango Riv. *Curson* 1117.

29. **C. zastrowii** Dinter & Pocock

mohorutse (Mbuk.)

Sprawling shrub of *Baikiaea* forest, Mhembo, Ngamiland. Flrs (June) deep red, precocious but persisting until the first lvs. appear which are downy. The virgate stems used to make fish traps. This spec. has also been referred to *C. microphyllum* Klotzsch and is near *C. virgatum* Welw. *Miller* B/424.

30. **C. zeyheri** Sond.

modubana (gen.) *mosinsi* (Sub.) *lesapo*, *teste* *Curson*.

Tree to 20 ft high. Bark pale. Frts the largest of our spp. to 7 cm. b. Lvs. glabrous except for the pubescent midrib. Flrs (Oct.), racemose. *Miller* B/6, B/308, B/319.

31. **C. sp.**

"Not matched in Nat. Herb." Collected in Ngamiland. *Curson* 114.

32. **C. sp.**

motenyane (Taw.) *motwekesane*.

"Matches one other unnamed sheet from Rhodesia in Kew Herb." A climbing shrub in *Baikiaea* forest on Ngwezumba Riv. Flrs Feb. *Miller* B/181.

33. **C. sp.** "efr *C. elaeagnoides* Klotzsch", Kew.

Slender many-stemmed shrub of Baikiaea forest. Flrs (Nov.—Dec.) pale yell., almost white. *Miller* B/1124.

34. **C. sp.**

Not matched at Kew or Nat. Herb. Shrub to 6 ft high in Baikiaea forest, Serondela. Lvs. long, narrow, greyish. Flrs collected in Dec. racemose, immature. *Miller* B/827.

35. **C. sp.**

mfhata (Kwena)

Tree seen 25 mis. W. of Molepolole. 12 ft high with larger lvs. than any other of our spp.

36. **C. sp.**

nr. *C. laxiflorum* Welw. *Miller* B/827, B/1265.

37. **C. sp.**

nr. *C. ternifolium*. On C.D.C. Ranch, Chobe. *Pole Evans* 4598.

38. **C. sp.**

kaungolo (Kol.)

Woody climber. Flrs (Jany) small, pale yell. racemose. Serondela. *Miller* B/1274.

PTELEOPSIS E. & D.

1. **P. myrtifolia** E. & D.

mwanzabelo, mufungi and mwanzabalo (Kol.) *teste* Martin.

Small tree of Baikiaea forest, Kazungula. Frt with winged margin. Brchls may have galls like "oak apples". Lvs. narrow, pointed at both ends. Makes ox yokes. *Miller* B/112, B/194.

TERMINALIA L.

Trees or shrubs with frts with winged margins.

1. **T. prunioides** Laws.

mochiara (gen. name also applied to *Homalium rufescens* and *Combretum schumannii*) mochara (Sub. & Kol.) mutororo (Mbuk.)

Tree of N.B.P. The crimson frts conspicuous. Wood hard and tough; Chapman, the explorer, made waggon axles of it. *Curson* 692. *Lugard* 41. *Mrs Lugard* 101. *Miller* B/127, B/190, B/1037. *Pole Evans* 4123. *van Son* H28818.

2. **T. randii** Bak. f.

Tree of the Tati dist. Lvs. small. Frts June. *Miller* B/411. *Pole Evans* 3265.

3. **T. sericea** Burch.

mogonono (gen.) mushosho (Mbuk.) mokuba (Mal.) mususu (Kalaka).

One of our commonest trees. To 30 ft high, but usually much smaller. Often growing gregariously on sandy soil. Frts (Jany—Apl) pink-green turning pale brown. Flrs (Nov.—Dec.) pale yell. or white, racemose. Wood yell., fairly durable, in much demand for hut building. Lvs. pale green with silvery tomentum, used for glazing pots. A browse tree but of low nutritive value. *Hillary & Rob.* 533. *Miller* B/60, B/86. *Pole Evans* 4001, 4217. *van Son* H28817.

4. ***T. stuhlmannii*** Engl.

Shrub 8 ft high. Much like no 1. Chobe & Ngamiland. *Curson* 103. *Miller* B/118.

5. ***T. sp.***

"This spec. may prove to be *T. spinosa* Engl. of which there is no authentic spec. at Kew. As Engler's name is 4 years older [than Baker's *T. randii*] it would have priority if conspecificity were established", Kew. Tree 14 ft high on water course 27 mis. W. of Francistown. Lvs. and frts (June) small. *Miller* B/411.

6. ***T. sp.*** nr *T. baumii* E. & G. and *T. selozensis* Gibbs

Small tree with large lvs. in Lesuma vall., Chobe. Frts much like those of no. 3. Brchlts with large galls. *Miller* B/505.

MYRTACEAE

SYZYGIUM Gaertn.

Evergreen, river bank trees with simple, entire gland-dotted lvs.

1. ***S. guineense*** (Willd.) DC.

mosane (G.N.P.) motoya (Kol.) mmako, *teste* Curson.

Common tree on rivers of N.B.P. The place name Kasane is derived from the vernacular name mosane. Bark whitish. Flrs (Oct.—Nov.) white. Frts pink-white. A few trees have been observed with bundles of fibrous aerial roots 6 ft up the bole. *Curson* 157, 800. *Miller* B/67, B/72. *van Son* H28950.

MELASTOMACEAE

DISSOTIS Bth.

1. ***D. princeps*** Triana

Shrub to 5 ft high with conspicuous blue-purple flrs having a distinctly jointed staminal filament. Lvs. opp., simple, ovate-acuminate, distinctly veined. Hab. moist places. Nata. *van Son* H28948.

ARALIACEAE

CUSSONIA Thbg.

1. ***C. paniculata*** E. & Z.

Cabbage Tree. mosetse (G.S.P.)

Tree to 20 ft high with few, much divided lvs; the lf-stalk to over 1 ft

long; lfts 7—9. Flrs in paniced heals, green. *Hillary & Rob.* 541. *Miller* B/213, B/647, B/650.

STEGANOTAENIA Hochst.

1. **S. araliacea** Hochst. (syn. *Peucedanum fraxinifolium* Hiern.) morobolo. muketu (*teste* Martin)

A carrot-stemmed small tree. Sap hemlock scented. Lvs. pinnate. *Miller* B/189. *Pole Evans* 4185. *van Son* H29032.

UMBELLIFERAE

HETEROMORPHA Cham. & Schltr.

1. **H. trifoliata** E. & Z.

mpyeya and serethe (Ngwak.)

Lvs. may be simple, 3-foliolate and pinnate on the same plant. Inflor. (Mch) umbellate. Frts May—June. Bark smooth, peeling horizontally to expose green underbark. Wood brittle. Pharing. *Miller* B/367, B/863.

PLUMBAGINACEAE

PLUMBAGO L.

1. **P. zeylanica** L.

mosikamabe (G.S.P.) bogoma (Kgat.)

Sprawling shrub. Flrs (Mch) white, calyx long, sticky. *Hillary & Rob.* 469. *Lugard* 5, 298. *Miller* B/341. *van Son* H28975.

SAPOTACEAE

Trees, rarely shrubs. Lvs. simple, entire.

CHRY SOPHYLLUM L.

1. **C. magalismontanum** Sond.

motlhatswa (Ngwak.) motlhakwa

Tree 10 ft high. Lvs. with white waxy covering on upper and red-brown tomentum on lower lf surface. Flrs cauliflorous. Frts edible. *Hillary & Rob.* 613. *Miller* B/661, B/785.

MANILKARA Adans.

mochisa (Sub. & Kol.)

1. **M. mochisia** (Bak.) Dub. (syn. *Mimusops mochisia*)

Tree 35 ft high and 30 ins. d.b.h. Flrs (Dec.) pale yell. Lvs. in whorls dark, leathery. *Miller* B/893, B/1128.

MIMUSOPS L.

1. **M. zeyheri** Sond.

moopudu (G.S.P.) mobu (Sub.)

Small, much branched evergreen tree. Frts plum-like, edible, important in native dietary. "Vitamin C content is 50—80 mgs. per 100 grams

of the edible portion", Dr B. T. Squires. *Miller* B/245. *van Son* H29001.

2. **M. sp.** nr *M. zeyheri*
chisamutizua (Sub.)

Tree 35 ft high with good cylindrical bole on Chobe Riv., Serondela.
Flrs (Oct.) white. Frts edible. *Miller* B/337, B/1161.

3. **M. sp.** possibly *M. sylvestris* S. Moore
moopudu (Ngwak.)

Tree 15 ft high on Kanye Hill. Frts, Mch, edible. *Miller* B/298.

4. **M. sp.** nr *M. kirkii* and *M. ausaramensis*.
moopudu

Tree 15 ft high on rocky slope 2 mis. E. of Molepolole. *Miller* B/220.

5. **M. sp.** nr *M. caffra* E. Mey.

Tree 40 ft high on termite mounds at Sitengu and Mukamba Pans,
Chobe. This may be *Manilkara mochisia*. *Miller* B/893.

EBENACEAE

DIOSPYROS L.

Trees with simple, altern., entire lvs.

1. **D. batocana** Hiern.
m njongolo (Kol.)

Tree 15 ft high. Bark thick, rough, black. Flrs (Sept.—Oct.) cauli-
florous, white, waxy. Frts 5 cm. l, 3 cm. b., globose, velvety. Lesuma
vall., Chobe. *Miller* B/480.

2. **D. mespiliformis** Hochst.

African Ebony (Standard Name) *mokochong* (Taw.) *muchenje* (Kol.)
utunda (Mbuk.) *mbiriri* (Sarwa)

Dark foliated tree to 35 ft high, evergreen on river banks (deciduous
in Tati dist, *teste* Wilmot). Wood not ebony-coloured, easily worked.
Frts (Sept.) edible, with persistent calyx, globose. *Miller* B/294, B/1178.
Pole Evans 4071.

EUCLEA L.

Evergreen trees and shrubs with black or black-purple (except no. 4).
shining, pill-like edible frts. Lvs simple and except in nos. 4 and 5,
glabrous. Flrs small, yell., fragrant. A difficult genus.

1. **E. divinorum** Hiern.

motlhakola (Taw.) *mutla kula* (Sub.)

Tree 17 ft high. Flrs Jan. *Curson* 1108. *Erens* 240, 242, 229, 254
Miller B/28, B/831, B/875. *Rob. & Elffers* 47. *Schoenfelder* S.155. *Sullivan*
H292.

2. **E. lanceolata** E. Mey.

musukula (Kol.) mokgwelekgwele and motakola (Taw.) motlhakolana, mokgwara (Kwena) motlhakolwana (Nwgak.) mushitondo (Mbuk.) agagule and ntshekesane (Kalaka)

Shrub 7 ft high. *Miller* B/446

var. **myrtina** Hiern.

Gaberones. *van Son* H28829.

3. **E. multiflora** Hiern.

Tati dist. *Pole Evans* 3262.

4. **E. natalensis** A. DC.

motlhakola, montsu wa matlhabele (Ngwak.)

Shrub 8 ft high. Frts (Feb.—Mch) red. Lvs. large for this genus, softly hairy. *Miller* B/687, B/314, B/588. *Pole Evans* 3261, 3262.

5. **E. racemosa** Murr.

Frts distinctly, lvs. sparingly hairy. A very bushy shrub among rocks. *Miller* B/446.

6. **E. undulata** Thbg.

motlhakola (G.S.P.)

Flrs March. *Miller* B/149, B/658, B/846, B/847.

7. **E. sp.**

"We have no material quite like this", I.F.I. Pharing. Flrs (June) many, yell., fragrant. *Miller* B/623.

ROYENA L.

Shrubs with simple lvs., opp. or in whorls. The vernacular names apply to all spp.

motlhaja (Kgat. & Thokwa) letadjwa (Taw.) lethabywa (Kwena) movitshi (Mbuk.) lethaja (Ralong).

1. **R. decidua** Burch.

Flrs pale yell., fragrant (Sept.—Dec.) Frts globose 1—2 cm. diam., red, with persistent sepals. *Hillary & Rob.* 524. *Lugard* 293. *Miller* B/1047, B/1006. *Rob. & Elffers* 524.

2. **R. hirsuta** L.

Miller B/467.

var. **microphylla** (Burch.) Burt Davy

Miller B/1094, B/485.

3. **R. pallens** Thbg.

Miller B/679, B/830.

4. **R. sericea** Bernh.

Miller.

OLEACEAE

JASMINUM L.

Shrubs. Lvs. of 3—7 lfts.

1. **J. fluminense** Vell. (syn. *J. mauritianum* Boj.)

molatsampya and *mogohe*, *teste* Curson.

Curson 144, 806. *Lugard* 230. *Pole Evans* 4182. *van Son* H28960.

2. **J. stenolobum** Rolfe

Shrub 3 ft high of Chobe & Ngamiland. Flrs (Nov.) white, sickly sweet, calyx tube with 12—14 pointed lobes. Frts (Jany) black, shining, calyx persistent. Lvs. hairy. The lfts have the appearance of being simple lvs., altern. except at ends of brchls where they are verticillate. *Curson* 209, 219. *Miller* B/155, B/1121.

3. **J. sp.**

Scrambling shrub. Flrs (Nov.) white. Kazungula. *Miller* B/383.

OLEA L.

1. **O. africana** Mill. (syn. *O. verrucosa* Link.)

Wild Olive. motlhwane (gen.) mokgwari (Ngwak.)

Much like the European Olive tree. On termite mounds grows to 30 ft high and 30 ins. d.b.h. Lvs. simple, opp., entire, pale green above, yell.-grey below. An evergreen much browsed by livestock. *Hillary & Rob.* 523. *Miller* B/799.

SCHREBERA Roxb.

1. **S. sp.** cfr. *S. buchananii* Bak. & *S. trichoclada* Welw.

mokauke (Taw. & Sub.) mokaoko (Kol. *teste* Martin)

Tree 25 ft high, 14 ins. d.b.h. Frts (Aug.) elongated-pear shaped, 2½ ins. l. Lvs. large, simple, opp., lanceolate. "Corolla with long tube and 4—8 imbricate lobes" (20). Spoons made from root wood. Kazungula. *Miller* B/643, B/1090.

LOGANIACEAE

LACHNOPYLIS Hochst.

1. **L. heterotricha** C. A. Smith

mokwerekwere and mohatantswe (Ngwak.)

Small tree 15 ft high of rocky hillsides. Flrs (May) cream coloured. Lvs. in whorls, leathery. *Miller* B/315.

2. **L. sp.** "between *L. heterotricha* & *L. pubescens*."

Shrub 8 ft high, Kanye Hill. *Hillary & Rob.* 543. *Miller* B/286.

STRYCHNOS L.

Trees & shrubs, some of which have strychnine in frt and bark. Lvs. entire, simple with the outer pr of veins parallel to the margin. Frts are orange-shaped with shining rind (except no. 6); some are edible.

1. ***S. cocculoides*** Bak.

mohoruhoru and mohoruhorwana (Kol.)

Evergreen tree 8 ft high. Lvs. stiff, mucronate. Bark corky. Kanye Hill. *Miller* B/554.

2. ***S. innocua*** Del. (syn. *S. dysophylla* Bth.)

mutemi (Toka)

Tree to 30 ft high. Frts (Sept.) edible. Lvs. small. Bark pale, smooth. *Miller* B/109A, B/1091.

3. ***S. pungens*** Solered

mohwahwa (Kwena) mutu (Mbuk.)

Tree 20 ft high. Lvs. as in no. 1. Flrs (Dec.) waxy, pale yell., with ring of hairs inside corolla. *Miller* B/965.

4. ***S. schumanniana*** Gilg

mogorugorwana (Kwena) mohoruhoru (Taw.) umi & m tu (Mbuk.)

Tree 20 ft high. Lvs. narrow, sharply pointed at apex. Spines decussate, opp. to each pr of brchls. Bark corky. *Miller* B/240, B/434.

5. ***S. spinosa*** Lam.

mogorogoro (G.N.P.) muyimbili (Kol.)

6. ***S. stuhlmannii*** Gilg

morumbarunde (Taw.)

Unarmed tree to 35 ft high, 2 ft d.b.h., often with several trunks. Near Serondela where it is plentiful it is often uprooted by elephant which eat the roots. Bark pale, often scored horizontally with teeth marks of baboons. The black, shining, plum-like frts (May—June) eaten by baboons and hornbills, said to be very poisonous to humans. Flrs (Nov.) green-yell. Lvs to 7 cm. l., are soft. *Miller* B/137, B/1045. *Rob. & Elffers* 58.

7. ***S. sp.*** nr *S. cocculoides* Bak.

mohoruhoru (Taw.) umi (Mbuk.)

Tree 12 ft high. Frts edible. Mohembo. *Miller* B/434.

APOCYNACEAE

Plants with milky juice. Lvs. simple, opp., entire.

BAISSEA A.DC.1. ***B. wulffhorstii*** Schinz

mothenyani (Taw.) mayatu (Kol.)

Climber in Baikiaea forest, with thin woody stem (3 mm. diam.) to 10 ft long; base of stem somewhat corky. Lvs. have the appearance of being prs in a pinnate lf; lanceolate, 16 mm. l., 6 mm. b. Flrs (Oct.) white. Follicles narrow, sharply pointed. *Miller* B/183, B/1109.

CARISSA L.

Lvs. hard, leathery, opp., simple.

1. **C. bispinosa** L.

simboba (Taw.) serokolo and morokolo

Evergreen shrub 3 ft high. The brelhts are spinose and usually forked. Flrs (Sept.—Oct.) white, strongly and pleasantly scented. Frts red, shining, edible. Lvs. shining. *Miller* B/670, B/677.

2. **C. edulis** Vahl var. **tomentosa** Stapf

Lax shrub 8 ft high, occasionally with support 20 ft. Flrs (Aug.—Sept.) pinkish white. Brelhts tomentose, not forked. Frts red. *Lugard* 16. *Miller* B/1086, B/1101. *Pole Evans* 4009. *Rob. & Elffers* 107.

DIPLORRHYNCUS Welw.

1. **D. angustifolia** Stapf

mulya (G.N.P.) mongoma (Mbuk.) manyela sibuku (Tati dist. *teste* Wilmot.)

Tree 12 ft high. Flrs (Oct.) white. Frts woody, like a small brown oyster shell; seeds winged. Latex used for bird-lime and as a specific for screwworm. *Miller* B/78, B/934.

LANDOLPHIA Beauv.

1. **L. capensis** Oliv.

Small Rambler. Flrs (Aug.) white, fragrant. Frts (Dec.) golf ball-like. Kgapung vall., Lobatsi and Kanye Hill. *Hillary & Rob.* 539. *Miller* B/829, B/910.

ONCINOTIS Bth.

1. **O. sp.**

Small twining shrub of N.B.P. Frts (Aug.) torpedo-shaped. *Erens* 374. *Miller* B/29. *Pole Evans* 4146.

STROPHANTHUS DC.

1. **S. kombe** Oliv. (syn. *S. hispidus* DC.)

mukutingi (Kol.) zwezwe (Taw.)

Sprawling shrub of N.B.P. Stem to 4 ins. diam. Flrs (Sept.) with long filamentous ends to corolla lobes. Frts (July) 8 ins. l., in prs, cigar-shaped; seeds with tufts of white hairs, furnish the drug strophanthin. Lvs. sparse. *Miller* B/25, B/46.

ASCLEPIADACEAE

Plants with milky juice. Lvs. simple. Frts follicles, single or in prs. Except *Asclepias*, the spp. mentioned below are climbers.

ASCLEPIAS L.

Lvs. opp. or verticillate.

1. **A. fruticosa** L.

mosita nokana (Taw.) modilela

Shrub 3—10 ft high. Lf-blades 2—6 ins. l. Yields a good fibre for sewing clothes and snaring birds. *Baines s. n.* *Miller* B/377.

2. **A. rostrata** N. E. Br.

Shrub 3—5 ft high, much like no. 1 "from which it is distinguished by a smoother, longer-beaked frt. Flrs creamy white." (20) *Lugard* 22, 231.

CRYPTOLEPIS R. Br.1. **C. oblongifolia** Schltr.

kgabantswe (Ngwak.)

Shrub 3 ft high. Lvs. 1 cm. l., shining. Bark red-brown, tough. Flrs (Dec.) whitish, inconspicuous. Frts (Apr—May) in prs, thin, tapering to fine points both ends. Hab. rocky places. Easily mistaken for *Landolphia capensis* when not in frt. *Miller* B/527, B/543.

FOCKEA Endl.1. **F. lugardi** N. E. Br.

"Creeping over rocks; flrs green." (2) Kwebe Hills. *Lugard* 299, type.

2. **F. sp.** (? *F. schinzii* N. E. Br.)

Large climber 40 ft long and 12 ins. diam. at ground level. Bark smooth, shining. Lfless in June. Frts solitary. At Ngoma on Chobe Riv. *Miller* B/1059.

GYMNEMA R. Br.1. **G. sylvestre** R. Br.

The only sp. A hairy climber. Lvs. opp., ovate. Flrs (Jany) yell., with white centre. Inner bark felty. Roots powdered to make an ointment for boils. Frts solitary. *Miller* B/295, B/1051.

MARSDENIA R. Br.1. **M. zambesiaca** Schltr.

Woody climber. "Frts green" (*Lugard*.) "Flrs creamy white" (*Mrs Lugard*) "Flrs white; frts solitary or occasionally in prs." (*Miller*). *Lugard* 60. *Mrs Lugard* 17. *Miller* B/105, B/1056.

STOMATOSTEMMA N. E. Br.1. **S. monteirae** N. E. Br.

The only sp. Flrs (Dec.) corolla bell-shaped with oblong segments, white, mottled brown-purple within. *Miller* B/330, B/1051.

TACAZZEA Decne.

1. **T. kirkii** N. E. Br.

litiela (Kol.)

Shrub on Chobe Riv. bank. Lvs. simple, opp., lanceolate. Juice milky. Inflor. axillary, flrs red without, green-yell. within, paniculate. *Miller* B/1280.

CONVOLVULACEAE

Lvs. simple, altern. Petals united into a 5-lobed corolla. (20)

IPOMOEA L.

1. **I. shirambensis** Bak.

muchare (Sarwa)

Woody climber of Chobe dist. Flrs (Aug.) white-mauve, precocious. *Miller* B/926, B/1088. *Rob. & Elffers* 91.

SEDDERA Hochstr.

1. **S. suffruticosa** Hall f. *var. hirsutissimus* Hall f.

Shrublet, stem & lvs. ashy grey on both surfaces, densely clothed with silky hairs to 4 cm. l. Flrs (Oct.) white. On Kgomo dia Tsaba Hill, dist. Mochudi. *Miller* B/473.

The typical form, "a ground creeper", was collected on the Kwebe Hills. *Lugard* 184. *Mrs Lugard* 203.

BORRAGINACEAE

Lvs., at least the upper ones, altern., undivided, usually hairy. Inflor. usually raceme- or spike-like (20)

CORDIA L.

1. **C. gharaf** (Forsk.) Ehrenb.

mwarasupe (Taw.)

Scrambler on termite mound. Flrs (Sept.) in heads. Okovango Delta. *Miller* B/487.

2. **C. sp.** (? pilosissima Bak.)

mutulu (Sub.)

Sprawling tree on Chobe Riv. bank. 2 stems of forked trunk each about 2 ft. diam. Lvs. $\pm$ broad as long, to 12 cm., soft. *Miller* B/1029.

EHRETIA L.

Shrubs to 12 ft high. Lvs. altern. or more usually verticillate. The genus requires revision.

1. **E. coerulea** Guerke

morobe (gen.)

Flrs (Nov.) lilac coloured. *Miller* B/84.2. **E. hottentotica** Burch.

morobe (gen.)

Common, widespread. Flrs (Sept.—Dec.) pale blue. Frt globose red turning black. *Miller*.3. **E. mossambicensis** Klotzsch."3—4 ft high. Flrs white, lilac or mauve." (2). Kwebe Hills. *Lugard* 36, 37. *Mrs Lugard* 48.4. **E. rigida** (Thbg) DruceAt Pharing. *Hillary & Rob.* 525.**SERICOSTOMA** Stocks1. **S. avolans** Fenzl.3 ft high. Flrs (Aug.) white & red with dense long hairs. Bark of upper stem green, smooth; of lower, brown, rough. Kanye Hill. *Miller* B/916.

VERBENACEAE

Lvs. opp. or whorled, very rarely altern., simple, except *Vitex*.**CHASCANUM** E. Mey.1. **C. pumilum** E. Mey.Woody plant 16 ins. high. Flrs (Mch) white. 16 mis. E. of Khakea, Kalahari. *Miller* B/1015.**CLERODENDRUM** L.

Lvs. opp. or verticillate.

1. **C. glabrum** E. Mey.An evil-smelling shrub. Flrs (Apl) white, in clusters. Tati. *Pole Evans* 3231, 3260.2. **C. lanceolatum** Guerke"Shrub 2½ ft high. Corolla snow-white, filaments red, anthers yell. Has an offensive smell when bruised" (2). Kwebe Hills. *Lugard* 91. *Mrs Lugard* 98.3. **C. myricoides** R. Br.Shrub 3—5 ft high. Lvs. 2 to 4-nate, deeply toothed but entire at base. "In Leshumo Forest" [Lesuma. nr Kazungula]. *Holub*.4. **C. simile** Pearsonlegonnyane, *teste* Curson.Ngamiland. *Curson* 338, 735.

5. **C. spinescens** (Oliv.) Guerke (syn. *Kalaharia spinescens* Oliv.)

Bushy shrub 18 ins. high. Often armed with small hooked or straight spines at the nodes. Flrs (Aug.) conspicuous, crimson. *Baines* s. n. *Lugard* 234. *Miller* B/1085. *Rob. & Elffers* 88. *Gertrude Theiler* 18585. *Watermeyer* s.n.

6. **C. sp.** nr *C. myricoides*

Shrub 3 ft high. Calyx white with purple rim. Frts are sometimes connate, the calyx persistent. Khale Hill, Gaberones. *Miller* B/184.

7. **C. sp.**

Ngamiland. *Curson* 390.

DURANTA L.

1. **D. plumieri** Jacq.

mhita obdula (Ngwak.)

A naturalised shrub with long, lax branches. Frts with 4 seeds, bright orange, conspicuous. Flrs (Mch) blue, in many fld cymes, conspicuous. Pharing. *Miller* B/299.

LANTANA L.

Inflor. cymose. Lvs. opp., toothed.

1. **L. salvifolia** Jacq.

mosukudu (Ngwak.) dikobetsa badisana, *teste* Curson

Low shrub. Flrs (Dec.) white or mauve, in heads. *Hillary & Rob* 512. *Holub. Lugard* 68. *Miller* B/534. *Rob. & Elffers* 87.

2. **L. sp.**

kgobedimabu (G.S.P.) mosukujwani (G.N.P.)

Shrub with reddish-white flrs. *Miller*.

LIPPIA L.

1. **L. asperifolia** Rich.

mosukutswana (Ngwak.) mosukubyane (Mang.)

Common bushy shrub. Flrs (Oct.—Dec.) in densely packed heads. Lvs. which have a mint-like smell used as a tea substitute. *Miller* B/712.

PREMNA L.

1. **P. senensis** Klotzsch.

Lax shrub. Lvs. simple, 12 cm. l., 7.5 cm. b. Flrs (Nov.) white, small, corolla 4-lobed, turning yell. after gathering, racemose. Serondela. *Miller* B/1120.

VITEX L.

Trees or shrubs with digitate lvs. and racemose inflor.

1. **V. mombassae** Vatke

Tree 9 ft high in Baikiaea forest, Chobe. Frts Apl. This spec. proved difficult and the determination was made at Kew. *Miller* B/3.

2. **V. zeyheri** Sond.

mokwele (G.S.P.)

Shrub 3—5 ft high. Lfts glaucous. Flrs (Nov.) pale blue. Hab. rocky ground. *Hillary & Rob.* 491. *Miller* B/234.

3. **V. sp.**

Not matched in Nat. Herb. Flrs (Nov.) from a coppice shoot in Baikiaea forest. Serondela. *Miller* B 381.

LABIATAE

Stems usually 4-angled. Lvs. opp. or whorled, very rarely altern., simple. Branches opp. Flrs in cymose false-whorls.

BECIUM Lindl.1. **B. angustifolium** N. E. Br.

mogatururu (Ngwak.)

A strongly scented plant 18 ins. high. Flrs (Apl.—Dec.) white. Lvs. linear. Bark rough, stringy. Included in *Ocimum* by Thonner. *Miller* B/571, B/613.

HEMIZYGIA Briq.1. **H. elliotii** (Bak.) M. Ashby

Woody plant 8 ins. high. Flrs (Oct.) mauve. Pharing. *Hillary & Rob.* 490. *Miller* B/515.

HOSLUNDIA Vahl1. **H. opposita** Vahl (syn. *H. decumbens* Bth.)

Shrub 3 ft high. Flrs (Dec.) white. Frts (Dec.) orange-coloured. Described in F.T.A. as a "much branched shrub to 15 ft high. Lvs. opp. Corolla lilac. Frt-calyx red, edible." Found in thorn scrub nr Zambesi Riv. and at Leshuma and Tamatsetse by Holub. *Holub.* *Miller* B/103, 154.

IBOZA N. E. Br.1. **I. sp.** cfr *I. bainesii*

mosito

Aromatic shrub 3½ ft high. Flrs (Sept.) mauve, very small. Lvs. deeply serrated. In gorge ¼ mile W. of Kanye. *Miller* B/917, B/1095.

OCIMUM L.1. **O. knyanum** Vatke

"Erect perennial 18 ins. high. Flrs mauve, aromatic." (2) Kwebe Hills. *Mrs Lugard* 67.

2. **O. tereticaule** Poir.

"Perennial 2 ft high, aromatic. Flrs purple. Lvs sometimes variegated" (2) Kwebe Hills. *Lugard* 96. *Mrs Lugard* 84.

SOLANACEAE

Lvs. altern; sometimes in prs; simple, but sometimes dissected. Flrs solitary or in cymose inflor. (20)

LYCIUM L.

Trees or shrubs with spinose brchls. Lvs entire, usually in whorls of up to 10.

1. **L. albiflorum** Damm.

lebutha (Taw.)

Shrub 6 ft high on termite mound. Flrs (Sept.) white. Frts small, globose, red. *Miller* B/488.

2. **L. arenicolum** Miers

"Shrub 9 ft high with blue-green, ridged branches. Lvs. without stalks" (21) Kwebe Hills. *Lugard* 70.

3. **L. caespitosum** Dinter & Damm.

Ghansi. *Dinter* 1964 (type ?) *van Son* H29016, H29017.

4. **L. oxycladum** Miers

Shrub 2½ ft high. Flrs (Apl) mauve. *Miller* B/500.

5. **L. tenue** Willd.

sitsautsau (Kal.)

Shrublet 2 ft high. Flrs (Mch) pale mauve. At Tsane, Kalahari. *Miller* B/1007.

6. **L. tetrandrum** Thbg.

morokolopodi

Shrub 3 ft high. Flrs June. At Mokobane. *Tittlestad* H787.

7. **L. sp.**

moroto a phiri (Kgat.) = horse urine.

Shrub 1 ft high. Flrs (Apl) small, blue. Mochudi. *Miller* B/572.

NICOTIANA L.

1. **N. glauca** R. Graham

Tree Tobacco.

An introduced shrub 8 ft high with glaucous lvs. Dam wall in Kanye village. *Miller* B/212.

SOLANUM L.

1. **S. coccineum** Jacq.

Lax shrub 4 ft high. Frts (Mch) red-brown. Lvs with prickles. Pharing. *Hillary & Rob.* 481. *Miller* B/844.

2. **S. incanum** L.

"Shrub 5 ft high, densely hairy. Corolla to $1\frac{1}{2}$ ins. diam., white or purple. Frts yell. to $1\frac{1}{2}$ ins. diam." (20) Lvs. with or without prickles. Kwebé Hills. *Lugard* 18.

3. **S. kwebense** N. E. Br.

mwarasupe (gen.)

Unarmed shrub $4\frac{1}{2}$ ft high. Flrs (Oct.) white or pale yell. Frts small. *Lugard* 50. *Mrs Lugard* 52. type. *Miller* B/469.

4. **S. omitiomirensis** Dumm.

$2\frac{1}{2}$ ft high. Flrs (Jany) white. Lobatsi. *Miller* B/1154.

5. **S. panduraeforme** E. Mey.

"Much branched shrub 2—4 ft high. Spines few or many. Corolla violet". (2). *Hillary & Rob.* 486. *Lugard* 55. *Mrs Lugard* 19. *Miller* B/576. *van Son* H29020. H29021.

WITHANIA Pauq.1. **W. somnifera** Dunal.

Shrub 5 ft high. Flrs (Nov.) green, in clusters. Lvs. entire. *Curson* 280. *Miller* B/93. *van Son* H29018, H29019.

SCROPHULARIACEAE

ANTHEROTHAMNUS N. E. Br.1. **A. rigida** (L. Bolus) E. P. Phillips (syn. *A. pearsonii* N. E. Br.)

Shrub to 8 ft high. Lvs. simple, very small, in whorls of 3. Flrs small, many in 1 head, cream coloured. It may flower in almost any month of the year. Hab. base of rocky hills. *Hillary & Rob.* 628. *Miller* B/501, B/518, B/793.

APTOSIMUM Burch.1. **A. lineare** Marl. & Engl.

"Collected nr Tklane Pits. A dwarf undershrub" (21). "Flrs deep purple" (2). *Lugard* 230.

HALLERIA L.1. **H. lucida** L.

Wild Fuchsia. No Tswana name.

So far only one plant recorded, though very common in many parts of S. Africa. The B.P. spec. comes from a tree 12 ft high (larger therefore than usual) with its roots in the intermittent Pharing Gorge stream. In 1946 floods broke off the stem and the plant now consists of coppice shoots only. Corolla tube to 3 cm. l. brown-red. Lvs. simple, opp., entire. *Miller* B/275.

SUTERA Roth.

1. **S. atropurpurea** Hiern (syn. *Lyperia atropurpurea* Bth.)
"heath-like undershrub 3 ft high" (21). Botletle vall. *Lugard* 267.
2. **S. burkeana** Hiern
Woody plant 2 ft high. Flrs (Feb'y) brown-purple. Pharing. *Miller* B/838.

WALAFRIDA E. Mey.

1. **W. paniculata** Rolfe
Prostrate woody, mat-like plant. Flrs (May) white. Lobatsi forest plantation. *Miller* B/1156.

BIGNONIACEAE

CATOPHRACTES G. Don

1. **C. alexandri** G. Don
motswana chukudu (Taw.) mogwadiri, *teste* Curson
The only sp. Shrub 3½ ft high. Flrs (Jany) large, conspicuous, blue-white. Frts (Oct.) grey, woolly. Lvs. simple, greyish. Ngamiland to Serowe & Francistown. *Curson* 162, 462. *Lugard* 65. *Mrs Lugard* 83. *Miller* B/920. *Pole Evans* 4025.

KIGELIA DC.

1. **K. pinnata** DC.
Sausage Tree. mzungula & izungwe (Sub.) mporota (Taw.) mubungubungu (Mbuk.)
Large tree of river banks. Flrs (Sept.), large, showy, eaten by antelopes. Frts sausage-shaped to 2 ft long with milky juice in cortex. Lvs. pinnate, large. Used to make dugout canoes. The place name Kazungula is from this tree. *Lugard* 233. *Miller* B/40. *Pole Evans* 4173. *Rob. & Elffers* 109.

MARKHAMIA Seem.

- Calyx spathe-like, split down one side. Frt with winged partition. Lvs. pinnate.
1. **M. acuminata** K. Schum.
"Tree 10—20 ft high. Flrs from russet to maroon. Pod long, brown".
(2) *Curson* 142, 775. *Lugard* 58. *Mrs Lugard* 55. *Miller* B/805. *van Son* H28775.
 2. **M. lanata** K. Schum.
mupatalwala (Sub.) mositsanyate (Kgat. & Taw.)
Small tree. Flrs (Jan.) yell. Frt 20 ins. l., seeds many. Makes a good axe handle. *Curson* 73. *Miller* B/108.

RHIGOZUM Burch.

Calyx bell-shaped.

1. **R. brevispinosum** O. Ktze.

mohurukwana (Ngwak.) mfurokwane (Kgat.) lokubulwra (Kal.)

Shrub often gregarious; 4 ft high. Flrs (Aug.—Dec.) yell., conspicuous. Lvs. simple, whorled, on hairy bosses. Occasionally a few lvs. are found at ends of brchls 3-foliate, the lfts the same shape as the lvs. *Curson* 765. *Hillary & Rob.* 584. *Miller* B/703, B/722, B/10008.

2. **R. trichotomum** Burch.

lokubulwra (Kal.)

A gregarious shrub to 6 ft high in grassland just above high water line of pans in S.W. Kalahari. *Miller* B/1011. *van Son* H28776, H28777.

PEDALIACEAE

Plants with glandular hairs. Lvs. opp., at least the lower ones simple. (20)

SESAMOTHAMNUS Welw.1. **S. lugardi** N. E. Br.

moboana, siboana *teste* Cardross Grant

Chakutsa Pan, Ngamiland, the type locality; and Tati dist. Trunk greatly swollen at the base from which arise several tapering stems. "Spiny shrubs with long white flrs, like Gardenia but corolla tube with long narrow spur at base" (10). *Grant* 10. *Lugard* 274, type. *Miller* B/1149.

ACANTHACEAE

Lvs. whorled or opp., simple.

BARLERIA L.

Lowly plants. Lvs. without prickles or teeth.

1. **B. eenii** S. Moore

Shrublet with woody stem, brchls semi-woody. Flrs (May) salmon-pink turning white when withered. Thin, sharp prickles at nodes. *Miller* B/1049. *Pole Evans* 4042. *van Son* H28685.

2. **B. galpinii** C. B. Cl.

Shrublet to 15 ins. high, among rocks. Stipules large, grey. Bracts large, red-brown. *Miller* B/994.

3. **B. lugardii** C. B. Cl.

A perennial of the Kwebe Hills. Flrs white. *Lugard* 128, type. *Mrs* *Lugard* 106.

4. **B. mackenii** Hook. f.

"branches minutely and densely white-hairy, glabrescent. Lvs. $2\frac{1}{4}$ ins. by 1 in., narrowed at both ends. Racemes mostly reduced to 1 fr, corolla mauve" (21). *McKen* s.n. type. *Lugard* 124.

5. **B. macrostegia** Nees

Procumbent plant with woody root stock. Flrs (Apl) blue, in heads with many bracts 4 cm. b. and l. *Lugard* 295. *Miller* B/1022. *van Son* H28682.

BLEPHARIS Juss.

1. **B. diversispina** C. B. Cl.

A perennial gathered on the Botletle Riv. Flrs blue. *Mrs Lugard* 6

CRABBEA Harv.

1. **C. velutina** S. Moore

A perennial of the Kwebe Hills. Flrs white. *Lugard* 131. *Mrs Lugard* 96.

DISPERMA C. B. Cl.

Flrs in axillary clusters. Bracts oblong, about as long as calyx.

1. **D. sp.** (sp. nov. ?) cfr *D. dentatum* C. B. Cl. & *D. serabridum* S. Moore.

Thin stemmed shrub 3 ft high on "black turf" of Chobe Riv. Lvs. and scales have a very pungent smell, oily. Used as an insecticide. Flrs (June. Nov.) blue-purple. *Miller* B/31, B/333. *Pole Evans* 4171. *Rob. & Elffers* 92.

DYSCHORISTE Nees

1. **D. transvaalensis** C. B. Cl.

Shrublet to 1 ft high. Flrs (Oct.—Nov. May) pale blue. Lvs. opp., entire. *Hillary & Rob.* 489. *Miller* B/509, B/612.

ECBOLIUM Kurz.

Frts flat, 2-seeded. Flrs in spikes.

1. **E. cognatus** N. E. Br.

"Shrublet 18 ins. high. Corolla bright sky-blue" (2). At Chukutsa Pan, Ngamiland. *Lugard* 223 type.

2. **E. lugardae** N. E. Br.

"A much branched shrublet 18 ins. high. Corolla light blue" (2) *Mrs Lugard* 212 type.

JUSTICIA L.

1. **J. odora** C. B. Cl.

Many stemmed sprawling shrublet. Flrs (Jany—May) yell., conspicuous. Lvs. entire, sparse. Ngamiland to Kanye. *Hillary & Rob.* 467. *Lugard* 72. *Mrs Lugard* 160. *Miller* B/281.

2. **J. sp.**

Not named in Nat. Herb. Shrub 2 ft high. Flrs (June) white with yell. lobes. Pharing. *Miller* B/624.

MONECHMA Hochst.1. **M. incanum** C. B. Cl.

mogato (Kal.)

Shrublet with twisted, stringy bark. Flrs (Mch) white. Lvs. opp., entire, glaucous. Tsane & Kokong. *Miller* B/345, B/10009, B/1020.

2. **M. nepata** C. B. Cl.

"Perennial to 2 ft high. Flrs pale mauve or purple-white" (21). *Lugard* 172. *Mrs Lugard* 131.

PETALIDIUM Nees1. **P. latifolium** C. B. Cl.

"2—3 ft high with soft silvery foliage; upper 4 lobes of corolla brick-red, lower lobe yell." (21). *Lugard* 121. *Mrs Lugard* 12.

RUELLIA L.1. **R. ratula** Jacq.

"small shrub, grey pubescent or sparsely hairy. Lvs. from $\frac{1}{2}$ by $\frac{1}{4}$ to $2\frac{1}{2}$ by $1\frac{1}{4}$ ins." (21). Flrs (Nov.) pure white. Hab. stony ground. Kwebe Hills and Pharing. *Hillary & Rob.* 484. *Lugard* 45, 49, 68. *Mrs Lugard* 63. *Miller* B/796.

2. **R. prostrata** T. And.

"Perennial to 2 ft high. Flrs mauve." (2). *Mrs Lugard* 89.

RUBIACEAE

Lvs. opp. or whorled, entire, sometimes with lf-like stipules. (20).

ANCYLANTHUS Desf.

Corolla curved, tubular. Stigma 5-lobed. (20)

1. **A. bainesii** Hiern.

mmkutso, *teste* Curson

Shrub of Ngamiland. *Curson* 791.

CANTHIUM Lam.1. **C. frangula** S. Moore

moswatyembe (Taw.) muswatshembe (Sub.)

Lax, bushy shrub 9 ft high. Lvs. to 4 cm. l., whorled. Spines decussate. Flrs (Dec.) small, green. Serondela. *Miller* B/1126.

2. **C. gilfillani** N. E. Br. (syn. *Plectronia gilfillani* N. E. Br.)

Shrub or small tree on bank of Muhoro, a permanent stream in Baratani Hill, dist. Gaberones. Frts (Dec.) oblong. *Miller* B/560.

3. **C. huillense** Hiern.

modumelantswe (Ngwak.) monyonyana

Common small tree, usually on rocky ground in S.B.P. The brchts and lvs. lie in one horizontal plane. Lvs. glabrous or slightly pilose. Flrs (Dec.) greenish, inconspicuous. Frts Jany. *Miller* B/533, B/555, B/556.

4. **C. randii** S. Moore

moopudu (Taw.) This name also applied to *Mimusops* sp.

Tree to 18 ft high and 10 ins. d.b.h., of *Baikiaea* forest. Flrs (Nov.—Dec.) green-yell. Frts March. Bark pale yell.-brown, smooth. Stem straight, fairly durable used as a hut pole. Lvs. ovate-acuminate, thin, 8 cm. l. by 7 cm. b. *Miller* B/124, B/1122.

5. **C. sp.** = *C. A. Smith* 6565 and *Gerstner* 5357.

Much like no. 3, but lvs. longer, to 7 cm. *Miller* B/543, B/557.

CROSSOPTERYX Fenzl.

1. **C. febrifuga** Bth.

molenga. malamakwa

Tree 20 ft high. Lvs. elliptic, entire, opp. Frts erect, egg-shaped, shining, dark brown, opening by 4 valves, $\pm$ 10 mm. l. "Flrs in panicles, corolla salver-shaped" (20). *Kazungula. Miller* B/637.

DIRICHLETIA Klotz.

1. **D. pubescens** Klotz.

Shrub 3 ft high. Flrs (Dec.) white, conspicuous, calyx large, 3-lobed. Kasane. (This plant found in flr in April nr Wankie, S. Rhodesia) *Miller* B/1138.

EMPOGONA Hook. f.

1. **E. kirkii** Hook. f.

Shrub 3 ft high in *Combretum* thicket nr Kasinka, Chobe. Flrs (Dec.) white. Frts Apl. "Flrs solitary or 2—3 together, without an epicalyx, calyx deeply lobed." (20). *Miller* B/191.

GARDENIA Ellis

1. **G. capensis** (Thbg.) Druce

Collected nr Pharing. Lvs. dark, leathery, 6—7 cm. l. Flrs not seen. *Hillary & Rob.* 546. *Miller* B/913.

2. **G. resiniflua** Hiern.

Shrub 6 ft high. Frts immature in Jany. Chobe and Ngamiland. *Curson* 111. *Miller* B/1282.

3. **G. spathulifolia** Stapf & Hutch.

morala (gen.) sulu (Kol.) kabunga (Sub.) moravi (Mbuk.) mtamba (Kakala)

Small branchy tree, often erroneously named *G. thunbergia*. Flrs (May to Dec.) to 9 cm. l., white turning dark cream, with powerful Gardenia smell. Frts football-shaped (*forma rugbeia*), hard, indehiscent, blue-grey, $\pm$ 7 cm. l., usually with about 7 longitudinal grooves. Wood white, tough, used to make spoons. Lvs. spatulate, but juvenile lvs. not so. Brchls. in 3s or 4s, equally spaced apart at nodes. Widely distributed tree. *Hillary & Rob.* 473. *Miller* B/48, B/717, B/779, B/933. *Pole Evans* 4122, 4188.

PAVETTA L.

Shrubs with conspicuous heads of white flrs and pill-shaped, shining frts.

1. *P. assimilis* Sond var. *brevituba* Brem.

Shrub 6 ft high, 3 mis. S. of Tpsi Siding. Lvs. spatulate. *Miller* B/806.

2. *P. cataractarum* S. Moore

Ngamiland. *Curson* 92.

3. *P. eylesii* S. Moore

kaijiwe (G.S.P.)

Shrub or small tree, 8 ft high. Bark brown, rough and half peeled off, often to ends of brchls. Lvs. large for this genus. Flrs Dec. Frts Apl. *Harbor* s.n. *Miller* B/313, B/331.

4. *P. harborii* S. Moore

The type was collected nr Mochudi. A shrublet of 8 ins. high, which resembles no. 7 except in stature. *Harbor* s.n. type. *Watermeyer* H992.

5. *P. lasiopetalus* K. Schum.

Ngamiland. *Curson* 378.

6. *P. marlothii* Bremek.

Type collected by Marloth in Mochudi dist. Shrubby 1 ft high. Close to no. 4. *Marloth*. *Miller* B/478.

7. *P. zeyheri* Sond. var. *sonderi* Brem.

maitla a dilule (Ngwak.) matiadule (Gaberones) tshitabanna

Slender tree to 12 ft high. Flrs (Dec.) yell.-white. Frt with a few stiff hairs. Bark whitish, striate. *Hillary & Rob.* 590. *Miller* B 243, B 332, B 529.

PYGMAEOTHAMNUS Robyns

1. *P. zeyheri* (Sond.) Robyns

moko (Ngwak.)

Annual shoots from a long horizontal rootstock. Flrs (Nov.—Dec.) yell.-green. Plant sometimes confused with *Dichapetalum cymosum*, but is not poisonous. *Miller* B/327, B/767.

var. *oatesii* (Rolfe) Robyns

Mochudi. *Marloth* 3333.

RANDIA Houst.

1. **R. vestita** S. Moore

Armed shrub 8 ft high. Flrs (Dec.) yell., Gardenia-like. Kazungula, Chobe. *Miller B/384*.

TAPIPHYLLUM Robyns

1. **T. parvifolium** (Sond.) Robyns (syn. *Vangueria parvifolium* Sond.) monyunwana

Shrub or tree to 10 ft high. Frts edible, crowned by the persistent calyx, 5-seeded, ± 2.3 cm. diam. *Hillary & Rob. 499. Miller B/260, B/553, B/558*.

TARENNA Gaertn.

Flrs in terminal corymbs. (20)

1. **T. luteola** Brem.

Shrub of the Baikiaea forest. Flrs (Nov.) white. *Miller B/88*.

VANGUERIA Juss.

Small trees and shrubs. Frts usually edible.

1. **V. infausta** Burch. non Hiern.

Wild Medlar. mmilo (gen.) mothwanye (Ngwak. & Tlapeng) mothwane and monyunyan (Ngwak.)

Tree ± 8 ft high. Lvs about 8 cm. l., tomentose, ovate-acuminate. Flrs yell.-green, inconspicuous. Frts (Nov.) *Hillary & Rob. 520. Miller B/228*.

2. **V. lasiocladus** K. Schum.

"Bush to 6 ft high. Flrs green." (2) Kwebe Hills. *Mrs Lugard 59. Miller B/193* from Kazungula may be this sp.

3. **V. tomentosa** Hochst.

Shrub 3—4 ft high. Flrs (Dec.) green. Khale Hill, Gaberones dist. & Kazungula. *Miller B/98*.

4. **V. sp.**

"nearest *V. proschii* Briq." (3). Collected at Kasane. *van Son H28843*.

5. **V. sp.** = Fraser 5837

Ngamiland. *Curson 812*.

The following native names were found applied to *Vangueria* spp.—moko, monyunyane, motwanye, momuntsumuntsu.

COMPOSITAE

The Daisy family. Leaves simple.

ARTEMISIA L.

1. **A. afra** Jacq.

Wormwood. longana (gen.)

Shrub to 3 ft high. Lvs. deeply incised, sage green above grey below, strongly smelling, somewhat mint-like, used medicinally and as a tea substitute. Flrs racemose, pappus wanting. *Miller*.

ASTER L.

1. **A. muricatus** Less.

An ericoid shrublet 5 ins. high. Flrs (Febry.—July) yell. *Hillary & Rob.* 549. *Miller* B/841, B/907.

BLUMEA DC.

1. **B. gariepina** DC.

mokudjani (G.N.P.)

Bushy shrub 2½ ft high. Lvs. small, pointed, grey-green. Flrs small, red or yell. Resembles *Pluchea leubnitziae*, *q.v.* *Miller* B/551. *Pole Evans* 4073.

BRACHYLAENA R. Br.

1. **B. rotundata** S. Moore

mohotantswe (Ngwak.)

Small tree in Mohoro vall., dist. Gaberones and Kapung vall., nr Lobatsi. village. Lvs. $\pm$ broad as long, 6 cm., pale green above, with white tomentum below, which can be rubbed off. Flrs (Sept.), pappus bristles in 2 rows. *Hillary & Rob.* 542. *Miller* B/559, B/676.

EURYOPS Cass.

1. **E. sp.**

Shrublet 8 ins. high on eroded ground nr Serowe. *Miller* B/227.

GEIGERIA Greisselich

1. **G. sp.**

makudi (sub.)

Shrub 2—3 ft high. Flrs (Dec.) yell. Lvs. altern., sessile. On sandy soil, Kachekau Flats, Chobe and in Ngamiland. *Curson* 363. *Miller* B/385.

PHILYROPHYLLUM O. Hoffm.

1. **P. schinzii** O. Hoffm.

"Bushy plant to 6 ft high. Flrs yell." (2) "Frts 10-ribbed." (20) *Lugard* 257. *Pole Evans* 4037.

PLUCHEA Cass.

1. **P. leubnitziae** (O. Kuntze) N. E. Br.

mokudjani (Taw.) mokoli and makodi, *teste* Curson.

Much like *Blumea gariepina*. *Curson* 29, 40. *Lugard* 1A. *Miller* B/291. *Pole Evans* 4100.

PSIADIA Jacq.

1. **P. arabica** Taub. & Spach.

mosikamabi (Ngwak.)

Slender single-stemmed shrub 3 ft high. Flrs (Oct.—June) yell. Lvs, linear, dark green, shining. Pharing. *Hillary & Rob.* 591. *Miller* B/284.

PTERONIA L.

1. **P. glauca** Thbg.

Small shrub with glaucous lvs. Flrs (Sept.) yell. Western Kalahari. *Miller* B/350.

TARCHONANTHUS L.

1. **T. camphoratus** L.

mohatlha (Ngwak.)

Small tree. Lvs. entire, aromatic, glaucous. Ripe frts like fluffy, dirty white balls. Wood burns when green. *Miller* B/202.

VERNONIA Schreb.

Lvs. simple, altern.

1. **V. amygdalina** Del.

monqo (Kob.)

Tree 13 ft high in grassland between Shorobe village and Gomoti Riv. Maun. Flrs (June) in broad heads, white, conspicuous. *Miller* B/442.

2. **V. colorata** Drake (syn. *V. senegalensis* Less.)

"Tree 15 ft high. Flrs cream coloured, highly scented. Okovango, Botletle & Taokhe valls." (21). *Lugard* 249. *Pole Evans* 4070, 4129.

3. **V. vitellina** N. E. Br.

Shrub with many slender stems 10 ft high. Inflor. (June) pale brick-red, in heads of 4—12, at ends of brchlts. Frts (June—July) with dingy pappus. *Lugard* 251. *Miller* B/1059, B/1060.

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GLOSSARY OF TERMS

ABBREVIATIONS

A

alate, with wing-like expansion
anther, pollen sac
aril, expansion of the funicle
armed, having spines, thorns
axillary, in angle formed by stem and leaf

B

b., broad
B.P., Bechuanaland Protectorate
bract, modified leaf between calyx and normal leaves
brchlt., branchlet

C

calyx, outer envelope of the flower
capitate, collected in a compact, head-like round cluster
carpel, simple female organ
cauliflorous, produced from the old wood
clavate, club shaped
cm., centimetre: about $\frac{1}{2}$ of an inch
compound, divided into separate leaflets
connate, united
coriaceous, leathery
corolla, inner envelope of the flower
corymb, flat-topped flower-cluster
crenate, notched with blunt teeth
cyme, broad flattened flower-cluster

D

d.b.h., diameter breast height
decussate, in pairs alternately at right angles
dehiscent, opening by valves, or slits
digitate, with leaflets diverging from the same point
dioecious, with male and female flowers on different plants
dist., district

E

entire, with margin whole and even, without toothing or division
ex descr., from the (published) description

F

filament, stalk bearing the anther
fls, flowers, but sometimes includes inflorescence
frt., fruit
ft., foot: feet, measure
F.T.A. Flora of Tropical Africa
funicle, stalk bearing the seed

G

gen., general
glabrous, smooth, without hairs
glaucous, bluish or grey-green
G.N.P., general in northern Protectorate
G.S.P., general in southern Protectorate
globose, nearly spherical

H

H before a number = herbarium, not collector's number
hab., habitat
Herb., herbarium
hom. homonym, the same name given invalidly to a different plant.

I

in., inch
indehiscent, not dehiscent or opening by valves
infor., inflorescence, a flower cluster
I.F.I., Imperial Forestry Institute, University of Oxford

J

jugate, yoke: pair

K

Kal., language of the Bakgalagadi
Kalaka, language of the Bakalaka
Kgat., language of the Bakgatla
Kob., language of the Bakoba
Kol., language of the Makololo

L

l., long
lanceolate, shaped like a spearhead
legume, pod
lft., leaflet
lenticel, lenticular, (with) corky spots on young bark
linear, long, narrow with parallel margins
lobe, division of an organ, especially a rounded division
loc., locality
lvs., leaves

M

Mal., language of the Bamalete
Mang., language of the Bangwato
Mbuk., language of the Mwambukushu
midrib, centre or main rib of leaf
mm., millimetre
moniliform, constricted over the seeds, necklace-like

N

N., north; northerly
 Nat. Herb., National Herbarium, Pretoria
 Ngwak., language of the Bangwaketsi
 nr., near

O

opp., opposite
 ovate, egg-shaped in outline

P

palmatisect, with divisions pointing to apex of petiole
 pappus, thistle-down
 patent, spreading
 pedicel, stalk of a single flower
 peduncle, stalk bearing one or several flowers
 petal, a leaf of the corolla perianth
 perianth, calyx, corolla or both
 petiole, foot stalk of a leaf
 pinna, primary division of a compoundly pinnate leaf
 pinnate, divided into pinnae
 pr., pair
 precocious, appearing when plant is leafless
 prickles, small, sharply pointed excrescences on leaves
 pubescent, covered with hairs

Q

q. v. which see

R

raceme, simple inflorescence of pedicelled flowers on an unbranched common axis
 racemose, having a raceme; raceme-like
 rachis, axis of a compound leaf
 riv., river
 reticulate, like the meshes of a net
 Rob. Collector's name—Miss R. Robertson

S

S., south; southerly
 sepal, leaf of the calyx
 serrate, toothed
 sessile, stalkless
 simple, of one piece, not compound
 sp., species, one
 spp., species, more than one
 spec., specimen
 spicate, spike, of flowers arranged on a simple, undivided stalk
 spine, sharp pointed outgrowth from the bark, not connected with cambium layer of wood
 spinose, of suppressed branchlets ending in a spine-like point—an outgrowth of the wood, not excrescent
 stamen, one of the male organs of the flower
 staminode, sterile or abortive stamen
 standard, fifth or posterior petal of papilionaceous corolla
 stipitate, having a stipe or special stalk
 sub., almost
 syn., synonym

T

tri- (3) foliolate, with 3 leaflets
 Taw., language of the Batawana
 terete, circular in section
 teste, on the evidence of
 Tlhok., language of the Batlhokwa
 tomentum, tomentose, a covering of, covered with, soft hairs

U

umbel, umbellate, inflorescence in which a cluster of pedicels spring from the same point

V

verticillate, whorled

W

whorl, of leaves set in a circle

Y

yell., yellow

ALPHABETICAL LIST OF NATIVE NAMES OF TREES,
SHRUBS, ETC., WITH SOME GRASSES AND OTHER
HERBACEOUS PLANTS

B

bannabothe. *Crotalaria lotoides*
boboya. *Gossypium* spp.*
boboya. *Xanthium spinosum* burrweed.
bogopa. *Setaria verticillata*, grass.
boguma. *Setaria sphacelata*, Kazungula
Setaria Grass.
bolatsi. *Kalanchoe rotundifolia*.
bophaphe. *Lippia nodiflora*.

C

chitamatusua. *Mimusops* sp.*
chiwonza. *Acacia stolonifera* var. *cho-
biensis**

D

digobetsa badisana. *Lantana salvifolia**
dikojana. *Corallocarpus sphaerocarpus*,
red fruited, climbing cucurbit.
dovuyu. *Adansonia digitata**
duwa. *Hippocratea loesneriana**

F

funde. *Vellozia retinervis*, blue fird plant
on sheet rock, stem used as a brush.

G

gaijiwe. *Pavetta eylesii**
godja ga dinonyani. *Setaria sphacelata*,
Kazungula Setaria Grass.
gogwana. *Arthrosolen polycephala*, yell.-
fird weed.
gomoti. *Ficus verruculosa**
gu. *Acacia arabica**

H

hulwane. *Adina glauca**

I

ibozu. *Adansonia digitata**
ijwairi. *Acacia kirkii**
inkoma. *Papyrus* spp.
ipopoja. *Sterculia tomentosa**
isika. *Garcinia livingstonei**
isikiri. *Trichilia emetica**
isunde. *Baphia obovata**
ivomena. *Kirkia acuminata**
izungwe. *Kigelia pinnata**

K

kabunga. *Gardenia spathulifolia**
kaijiwe. *Pavetta eylesii**
kakomo. *Albizzia versicolor**
kananga. *Acacia albidia**
kangarangana. *Acacia retinens**
kankolo. *Combretum mossambicense**
kasinsi. *Combretum apiculatum**
kaungolo. *Combretum* sp.
kenyani. *Imperata cylindrica*, grass.
keye. *Dichrostachys glomerata**
kgabantshwe. *Cryptolepis oblongifolia**
kgalahete. *Talinum caffrum*, yell.-fird
pioneer.
kgatlo. *Gymnema sylvestre**
kgobedimabu. *Lantana* sp.*
kgotudwa. *Nidorella residaefolia*, yell.-
fird herb.
konggwane. *Arthrosolen polycephala*,
yell.-fird weed.
kotsharuwa. *Vernonia steetziana* O. & H.
herb with cornflower-coloured flrs of
Kalahari
kowatshi. *Asparagus* spp.
kuma. *Papyrus* spp.
kwaipi. *Oxyris compressa**

L

lebutha. *Lycium persicum**
lebelebele. *Pennisetum spicatum*, grass.
lefthetho. *Pogonarthria falcata*, grass.
lefshwe. *Gymnema sylvestre**
legonnyana. *Clerodendrum simile**
lehatlho. *Geigeria* sp.
lehuto. *Phragmites mauritianus*, reed.
lelane. *Bergia procumbens**
lenapa. *Rhynchelytrum roseum*, grass.
lenyele. *Sesbania aegyptiaca**
lenko. *Albizzia versicolor**
letlhalka. *Phragmites mauritianus*, reed.
letlhakana. do.
lerula. *Acacia nebrowii**
lerura. do.
lerwana. do.
lesapo. *Combretum zeyheri**
lesatswane. *Ochna* sp.?
leshotwe. *Brachiaria nigropedata*, grass.
leshwe. *Pentarrhinum insipidum*, climber
with pointed follicles and milky juice.
leshwi. do.
lethajwa. *Royena* spp.*
letlhabye. do.
letlhaja. do.
letsane. *Nesaea mucronata*.
letshoo la khudu. *Ranunculus pubescens*,
buttercup.

letsitsi. *Hibiscus cannabinus*, a fibre plant.
 leunedu. *Asparagus* spp.
 litanga. *Fockea schinzii**
 likulukhazi. *Cassine* sp.*
 logetlha. *Bulbine* sp., yell-fld lily with
 yell. juice.
 logolo. *Aptosimum marlothii*, purple fldr
 herb.
 lokobulwana. *Rhigozum trichotomum**
 lokwati. Name given to several trees and
 useless for identification purposes.
 longana. *Artemisia afra**
 loka. *Cotyledon orbiculata*.
 lutshi. See leshwe.

M

mabele. *Setaria sphacelata*, grass.
 maduma marago magolo. *Themeda
 triandra* (forma), grass.
 magwatwa. *Blepharis maderaspatensis*,
 white fldr herb.
 maitla a dilule. *Pavetta zeyheri**
 majokwani. *Hydnora* sp., large edible
 tuber.
 makakari. *Harpagophyton procumbens*,
 the Grapple Plant.
 makankale. *Grewia* spp.*
 makgonatsotlhe. *Melolobium** sp. and
*Sphedamnocarpus pruriens**
 makudi. *Pluchea leubnitziae** and *Geigeria*
 sp.*
 makuku. *Hibiscus cannabinus*, a fibre
 plant.
 makulwane. *Heteropogon contortus*, grass.
 malamatwa. *Crossopteryx febrifuga**
 maladitapi.
 maletle anjwa. *Gloriosa* spp., red fldr lilies.
 mangole. *Digitaria eriantha*, grass.
 manyelaseboko. *Diplorhynchus angustifolia**
 maphate. *Grewia pilosa**
 marago aba humagade. *Grewia* spp.
 marago magolo. *Cymbopogon* sp., grass.
 marama golo. *Bothriochloa glabra*, grass.
 marete. *Hibiscus cannabinus*, a fibre
 plant.
 maseka. *Digitaria eriantha*, and *Eleusine
 indica*, grasses.
 matakwalobi. *Bridelia mollis**
 mathiadule. *Pavetta zeyheri**
 mbaimbai. *Amblygonocarpus obtusangulatus**
 mborambunga. *Combretum imberbe**
 mbuti. *Citrullus naudinianus*, cucurbit.
 mchiara. *Homalium rufescens**
 mfhafha. *Panicum maximum*, grass.
 mfhata. *Combretum* sp.*
 mfurokwane. *Rhigozum brevispinosum**
 mhaha. *Panicum arcuameum*, grass with
 edible seeds.
 mhahu. *Acacia* spp.*

mharatshweni. *Sphedamnocarpus transvaalicus**
 mhata. *Lonchocarpus nelsii**
 mhatlhwantse. *Lachnopylis heterotricha**
 mhawa. *Ficus soldanella**
 mherehere. *Gymnosporia tenuispina**
 mherwane. *Sida* sp.*
 mhetula. *Indigofera* spp.*
 mhita obdile. *Duranta plumieri**
 mhota. *Commiphora* spp.*
 mhotswa. *Grewia* sp.*
 mhure. *Acacia arabica**
 mhutswana. *Acanthospermum hispidum*,
 Erect Starbur.
 mkakama. *Cymbopogon excavatus*, grass.
 mkalati. *Burkea africana**
 mkutso. *Ancylanthus bainesii**
 mmaba. *Securidaca longipedunculata**
 mmabi. *Urea tenax**
 mmako. *Syzgium guineense**
 mmilo. *Vangueria infausta**
 mmola. *Parinari capensis** and *Albizzia
 rogersii**
 mmola hatshe. *Parinari capensis**
 mmono. *Ricinus communis**
 mmopudu. *Mimusops* spp.*
 moana. *Adansonia digitata**
 moarungarunga. *Albizzia struthiophylla**
 mobeane. *Lannea discolor** and *Sesamothamnus lugardii**
 moboana. *Sesamothamnus lugardii**
 mobokololo. *Cassia obovata*, yell.-fldr.
 herb.
 mobola. *Parinari mobola**
 mobola hatshe. *Parinari capense**
 mochaba. *Ficus* spp.*
 mochacha. *Adenia glauca**
 mochanja. *Bauhinia macrantha**
 mochara. *Terminalia prunioides**
 mochare. *Ipomoea shirambensis**
 mochope. *Bauhinia macrantha**
 mochwarakgano. *Albizzia versicolor**
 modija. *Peltophorum africanum**
 modilela. *Asclepias fruticosa**
 modubana. *Combretum* spp.
 modubatshipi. *Combretum holosericeum**
 modubu noka. *Combretum glomeruliflorum**
 modumela. *Kirkia acuminata**
 modumelantswe. *Canthium huillense**
 modutu. *Celtis africanus**
 mofurokwane. *Rhigozum brevispinosum**
 moga. *Acacia robusta** and *A. detinens**
 mogata wa pheba. *Setaria sphacelata*,
 grass.
 mogato. *Monechma incanum**
 mogatololwane. *Plinthus laxifolius*.
 mogatururu. *Becium brevispinosum**
 mogau. *Dichapetalum cymosum** and
Clematis spp.*
 mogodiri. *Rhus pyroides**
 mogohe. *Jasminum fluminense**

For names marked * see previous pages.

- mogokatau. *Acacia ataxacantha**
 mogolo. *Melobium* sp.*
 mogolori. *Rhus* sp.*
 mogonono. *Terminalia sericea**
 mogorogoro. *Strychnos spinosa**
 mogotho. *Acacia giraffae**
 mogotiri. *Celtis africanus**
 mogotlho. *Acacia giraffae**
 mogotolwane. *Plinthus laxifolius*.
 mogogorwana. *Strychnos schumanniana**
 mogwadibe. *Pseudocassine trans-*
*vaalensis**
 mogwadiri. *Catophractes alexandri**
 mogwagwa. *Strychnos* spp.*
 mogwagwana. *Scolopia mundii**
 mogwana. *Grewia* spp.*
 mogwediri. *Rhus pyroides**
 mohamani. *Dialium simii**
 mohambia. *Ximenia* spp.*
 moharatswene. *Acalypha glabrata**
 mohata. *Lonchocarpus capassa**
 mohatantswe. *Brachylaena rotundata**
 and *Lachnopylis heterotricha**
 mohatla. *Tarchonanthus camphoratus**
 mohatlha. *Tarchonanthus camphoratus**
 mohetula. *Cassia occidentalis*.
 mohodiri. *Combretum apiculatum**
 mohodiri tshipi. *Combretum* sp.*
 mohoto. *Acacia giraffae**
 mohubu. *Adenia glauca**
 mohuditsbane. *Rhus magalismontanum**
 mohurokwana. *Rhigozum brevispinosum**
 mohurukwana. *Rhoicissus* spp.*
 mohutswa. *Grewia* spp.*
 mohwahwa. *Strychnos* spp.*
 moisatumo. *Commiphora* sp.*
 mokabi. *Combretum* spp.*
 mokaikai. *Bergia procumbens**
 mokakata. *Sterculia* spp.*
 mokala. *Acacia* spp.*
 mokamanawe. *Bridelia mollis** and
Grewia sp.*
 mokamakama. *Themeda triandra*, grass.
 mokapana. *Citrullus naudinianus*,
 cucurbit.
 mokata. *Combretum transvaalense**
 mokga. *Acacia arabica**
 mokgalo. *Zizyphus* spp.*
 mokgasi. *Cyperus longus* var. *tenuifolius*
 and *C. fastigiatus*, sedges used for
 making baskets.
 mokgompata. *Grewia* spp.*
 mokgwa. *Acacia* spp.*
 mokgwara. *Euclea* spp.*
 mokgware. *Olea africana**
 mokha. *Acacia karroo**
 mokholo. *Acacia haematoxylon**
 mokgwelekgwele. *Acacia* spp.* and ?
Euclea spp.*
 mokhi. *Acacia gerrardi**
 mokhuke. *Mundulea sericea**
 moko. *Vangueria* spp.* and *Pygmaeothe-*
*mus zeyheri**
 mokoakoa. *Gloriosa* spp. red fldr. lilies.
 mokoba. *Acacia burkei**
 mokobongo. *Albizzia versicolor**
 mokoka. *Acacia cinerea** and *A. mellei**
 mokokole. *Bridelia mollis**
 mokokonana. do.
 mokokwele. do.
 mokokwenana. do.
 mokole. *Pluchea leubnitziae**
 mokomoto. *Commiphora edulis**
 mokongwa. *Ricinodendron rautanenii**
 mokoshi. *Bauhinia macrantha**
 mokotokoto. *Acacia burkei**
 mokosho. *Acacia albidia**
 moku. *Acacia robusta**
 mokuba. *Terminalia sericea**
 mokudjani. *Blumea gariepina** and
*Pluchea leubnitziae**
 mokuka. *Acacia ataxacantha**
 mokukari. *Acacia pennata**
 mokukutu. *Grewia occidentalis**
 mokula. *Hyphaene* sp., palm.
 mokhure. *Ricinus communis** and *Str-*
monium daturum, Stinkblaar.
 mokutsomo. *Diospyros mespiliformis**
 mokwa. *Pterocarpus angolensis**
 mokwele. *Vitex zeyheri**
 mokwelekwale. *Acacia* spp.*
 mokwerekwere. *Lachnopylis heterotricha**
 molahatshe. *Parinari capense**
 molalakgakga. *Albizzia* spp.*
 molalaphage. *Schmidtia bulbosa*, grass.
 molalatau. *Phaeoptilum spinosum**
 molatsampya. *Jasminum fluminense**
 molatswe. *Combretum holosericeum**
 molekangwetsi. *Cenchrus ciliare*, *Ennea-*
pogon cenchroides and *Pennisetum*
ciliare, grasses.
 molemogale. *Phragmites* sp., reed.
 moloto. *Acacia dulcis**
 molubare. *Combretum* spp.*
 monambete. *Erythrina* sp.*
 monato. *Burkea africana**
 monepenepene. *Cassia abbreviata**
 mongana. *Acacia detinens**
 mongana khudu. *Acacia caffra**
 mongololo. *Pouzolzia hypoleuca**
 mongone. *Boscia albitrunca**
 mongywani. *Mimosa pigra**
 monnaokgang. *Myrothamnus flabellifo-*
*lius**
 monoga. *Albizzia anthelmintica**
 monokane. *Heeria* spp.*
 monomani. *Cassine* sp.*
*Pseudocassine transvaalense**
 mononyane. *Scolopia mundii**
 monqo. *Vernonia senegalensis**
 montsiara. *Homalium rufescens**
 montsho wa matlabele. *Euclea natalen-*
*sis**

- monwana. *Byrsocarpus orientalis**
- monyaka. *Acacia detinens**
- monyana. *Bidens shimperi*, "Black Jack".
- monyelenyele. *Ochna* spp.*
- monyena. *Faurea saligna**
- monyonyana. *Canthium huillense**
- monyunyana. *Vangueria* spp.* and *Taphiphyllum parvifolia**
- mooka. *Acacia karroo**
- mookana. do.
- mooku. *Acacia uncinata**
- mooluga. *Croton* spp.*
- moomani. *Maerua schinzii**
- moomelantsweng. *Ficus soldanella**
- moopudu. *Mimosa* spp.* and *Canthium randii**
- mootswana. *Lannea discolor**
- mopanye. *Indigofera melanodenia**
- mopennweeng. *Pappea capensis**
- mophethe. *Erythrina* sp.* and *Abrus precatorius**
- mophani. *Colophosperma mopane**
- mophutlu. *Cyperus fastigiatus*, sedge used for basket making.
- mopipi. *Boscia rehmanniana**
- mopiti. *Abrus precatorius**
- mopororo. *Lonchocarpus capassa**
- moporota. *Kigelia pinnata**
- mopyane. *Lannea discolor**
- morojwa. *Thespesia garkeana**
- morala. *Gardenia spathulifolia**
- moralo. *Acacia kirkii**
- morama. *Bauhinia esculenta*, Kalahari plant yielding a rich bean.
- moraro. *Acacia kirkii**
- moratletlha. *Maerua schinzii**
- moratletlha. do.
- moralwane. *Secamone viminalis*, leafless laticiferous plant sprawling over other plants.
- morebe. *Hemizygia elliotii**
- more o mabele. *Acacia nigrescens**
- more o masetlha. *Acacia xanthophloea**
- morekhure. *Spirostachys africana**
- moretlhwa. *Grewia flava**
- morezwa. do.
- morobe. *Ehretia* spp.*
- morobe omtuna. *Indigofera melanodenia**
- morobolo. *Steganotaenia aralacea**
- moroka. *Commiphora* spp.*
- morokolo. *Carissa bispinosa**
- morotamadi. *Pterocarpus angolensis**
- morotlhetle. *Scolopia mundii**
- morotologa. *Ximenia* spp.*
- morotologana. do.
- morotologakgomo. do.
- morotonoga. do.
- moroto a piri. *Lycium* sp.* and *Pollichia campestris**
- morukuru. *Spirostachys africana**
- morula. *Sclerocarya caffra**
- morolana. *Melia azedarach**
- morolwana. do.
- morumasetlha. *Acacia woodii**
- morumbarunde. *Strychnos stuhlmannii**
- morupapiri. *Rhus* spp.*
- morutlha. *Strychnos* spp.*
- morutlhari. *Acacia caffra**
- morutlhatshana. do.
- morutlhware. do.
- morutse. *Vellozia retinervis*, rock plant with blue flrs., stems used for brushes. also *Cyperus compactus*, sedge.
- morwa. *Sclerocarya caffra**
- mosalaosi. *Melia azedarach**
- mosapateke. *Grewia* spp.*
- moseka. *Setaria sphacelata*, grass.
- moseka omogolo. *Bothriochloa insculpta*, grass.
- moseka omonyinye. *Digitaria eriantha*, grass.
- moselatshwene. *Cenchrus ciliare*, grass.
- moselesele. *Dichrostachys glomerata**
- mosetlha. *Peltophorum africanum**
- mosetlhatlou. *Mundulea sericea**
- mosetsamute. *Markhamia* spp.*
- mosetsanate. do.
- mosetse. *Cussonia paniculata**
- moshabela. *Rhus lancea**
- moshaoka. *Acacia grandicornuta**
- moshu. *Acacia litakunensis**, *A. spirocarpa** and *A. arabica**
- mosiga wa poo. *Sphenostylis erecta*, leguminous herb.
- mosiama. *Senecio laxiflorus*, herb said to be used for washing new-born babies.
- mosimama. do.
- mosigomabe. *Plumbago zeylanica** and *Psiadia arabica**
- mosilabele. *Rhus lancea**
- mosita nokana. *Asclepias fruticosa**
- mositlha ba tau. *Mundulea sericea**
- mositsanate. *Markhamia* spp.*
- mosito. *Iboza* sp.*
- mositsane. *Elephantorrhiza* spp.
- mositwane. *Asparagus* spp.
- mosokophala. *Bolusanthus speciosus**
- mosokatsebe. *Sansevieria* spp., Bow-string Hemp.
- mosokelatsebe. do.
- mosu. *Acacia litakunensis**, *A. spirocarpa** and *A. arabica**
- mosukubanye. *Lippia asperifolia**
- mosukudu. *Lantana salvifolia**
- mosukujwani. do.
- mosunyane. *Acacia litakunensis**
- moswapeba. *Combretum* spp.
- moswapedi. *Croton subgratissimus**
- moswatyembe. *Canthium frangula**
- motaba kgosi. *Acacia arabica**
- motakola. *Euclea* spp.*
- motawana. *Capparis tomentosa**
- motatswa meno. *Polygonum setulosum*.

- mothenyane. *Combretum* sp.*. *Baissea wulfforthii** and *Schmidtia bulbosa*, grass.
- motha. *Pseudocadia zambesiaca**
- mothanthanyane. *Asparagus* spp.
- mothata. *Pappea capensis**
- mothono. *Gymnosporia buxifolia**
- mothwakeya. *Baphia obovata**
- mothlaba kulube. *Xanthium* sp., Cocklebur.
- motlhaja. *Royena decida**
 motlhakola. *Euclea* spp.*
 motlhakolana. do.
 motlhakolwana. do.
 motlhakutsane. *Maerua angloensis**
- motlhakwa. *Chrysophyllum magalison-tanum**
- motlhatswa. do.
 motlhatla ba dimo. *Chenopodium am-brosioides*, medicinal herb sometimes cultivated.
- motlhatsa. *Ficus pretoriae**
- motlhakomoti. *Entandrophragma cauda-tum**
- motlhono. *Gymnosporia buxifolia**
- motlhware. *Olea africana**
- motlhopi. *Boscia albitrunca**
- mothwane. *Vangueria infausta**
- motlwanye. do.
 motlopi. *Boscia albitrunca**
- motoroko. *Opuntia* spp., Prickly Pear, Spiny Cactus.
- motsaudi. *Garcinia livingstonei**, *Guibourtia coleosperma**
- motswarakgano. *Achyranthes aspera*, herb used with snuff.
- motsha. *Acacia arabica**
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- mubungubungu. *Kigelia pinnata**
- mubuyu. *Adansonia digitata**
- mubwiti. *Croton megalobotrys**
- muchare. *Ipomoea shirambensis**
- muchenje. *Diospyros mespiliformis**
- muchinga. *Popowia obovata**
- muchingachinga. do.
 muchisa. *Manilkara mochisia**
- mudyangwe. *Capparis tomentosa**
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- mukondekonde. *Popowia obovata**
- mukongotshi. *Albizzia versicolor**
- mukonka. *Garcinia livingstonei**
- mukononga. do.
 mukonkotsi. *Erythrophloeum africanum**
- mukulukuncha. *Acalypha glabrata**
- mukumati. *Rhus commiphoroides**
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- mulya. *Diplorhynchus angustifolia**
- mulyanzovu. *Pterocarpus martinii**
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 mukunyabambi. do.
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- mukutinga. *Strophanthus kombe**
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- mulubana. *Combretum* sp.*
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 mupopoja. *Sterculia tomentosa**
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 murumasele. *Acacia woodii**
 murura. *Acacia* sp. with white spicate
 infior.
 musamba. *Lannea discolor**
 musane. *Syzygium guineense**
 musekese. *Piliostigma thonningii**
 musheshe. *Burkea africana**
 mushitondo. *Euclea* spp.*
 mushosho. *Terminalia sericea**
 musika tambo. *Royena* spp.*
 musikiri. *Trichilia emetica**
 musimba. *Dialium simii**
 musinsi. *Combretum zeyheri**
 musiru. *Peltophorum africanum**
 musokanzebe. *Sansevieria cylindrica*,
 Bowstring Hemp.
 musokola. *Euclea lanceolata**
 musukula. do.
 mususu. *Terminalia sericea**
 muswabenge. *Acacia woodii**
 muswatshembe. *Canthium frangula**
 mutemi. *Strychnos innocua**
 mutenena. *Abrus precatorius**
 mutondo. *Isobertinia globiflora**
 mutoya. *Antidesma venosum**
 mutu. *Strychnos* spp.*
 mutulu. ? *Cordia pilosissimus**
 mutumbulwa. *Flacourtia ramontchi** and
*Sida rhombifolia**
 mutupa. *Boscia* spp.*
 mutumutya. *Isobertinia globiflora**
 mutusu. *Fockea schinzii**
 muvimba. *Combretum imberbe**
 muvitshi. *Royena* spp.*
 muvombo. *Brachystegia boehmii**

mayevi. *Peltophorum africanum**
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 muxuwa. *Antidesma venosum**
 muyatu. *Baïsea wulforstii**
 muyimbili. *Strychnos spinosa**
 muzamalowa. *Ostryderris stuhlmannii**
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 mwanzabalo. *Pteleopsis myrtifolia**
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 mwarasupe. *Solanum* spp.*
*Waltheria americana** and *Cordia ovalis**
 mwembera. *Cleome hirta*, purple flrd herb.
 mwimbili. *Strychnos spinosa**
 mwithimudiso. *Cotyledon orbiculata*, dried
 stem used in desert as a "sip stick".

N

nakgwa. *Hydnora* sp., large edible tuber
 of Delta Country of Ngamiland; above-
 ground shoot seldom seen.
 namba. *Elephantorrhiza burkei**
 nanyama. *Fockea schinzii**
 ngagula. *Euclea* spp.*
 nganganga. *Erythroxylum* sp.*
 ngogo. *Euphorbia* sp.*
 ngwenyane. *Pouzolzia hypoleuca**
 nimpipi. *Boscia kalachariensis**
 nkgone. *Elaeodendron capense**
 nkulambela. *Pterocarpus angolensis**
 nkumbakumba. *Bridelia mollis**
 nlungu. *Heeria salicina**
 nsasane. *Rhus gueinzii**
 nqanda mshoro. See onkatiramoshoro.
 nsekese. *Piliostigma thonningii**
 nshashanyana. *Cassia abbreviata**
 nsibi. *Guibourtia coleosperma**
 nsukungaphala. *Bolusanthus speciosus**
 nungwani. *Mimosa pigra**
 nyuwi. *Hippocratea obtusifolia**
 nzani. *Hesperethusa villosa**

O

onkatiramoshoro. *Orthanthera brownia-*
num, Useful sand-fixer of Chobe and
 Ngamiland.
 oshi. *Guibourtia coleosperma**

P

palamela. (= climber) *Loranthus* spp.*
 and *Ansellia* sp., an epiphytic orchid.
 pelobothuku. *Geigeria passerinoides*,
 yell-flrd composite.

phalwane. *Rhynchelytrum roseum*, grass.
 phepheng. *Gomphostigma scoparoides*, a
 poisonous plant.
 pheho. *Lannea edulis**
 pherephere. *Abrus precatorius**
 photo. *Pretrea zanguibarica*, prostrate
 herb, frts shield-shaped with 2 formid-
 able spines.
 phuka. *Paspalum scrobiculatum*, grass.
 pilibutuku. *Mimosa pigra**
 poke. *Urochloa helopus*, good pasture
 grass.
 pokudza. *Croton megalobotrys**

R

ramagola. *Acanthospermum xanthoides*,
 Prostrate Starbur.
 rathatha. *Eragrostis lehmanniana*, *Dac-
 tyloctenium aegyptiacum*, grasses.
 rongwe. *Antidesma venosum**
 rotho. *Gynandropsis pentaphylla*, a food
 plant.

S

sapolanaga. *Hesperethusa villosa**
 sebetse. *Cassia obovata*, yell.-fldr herb.
 segopa. *Piliostigma thonningii**
 segope. *Dalechampia capensis**
 segolobe. *Bulbostylis coleotriche*
 seheho. *Acalypha petiolaris*, herb.
 sentsho. *Baphia obovata**
 seragola. *Carissa bispinosa**
 serethe. *Heteromorpha trifoliata**
 seretwane. *Waltheria americana**
 seroka. *Commiphora* spp.*
 serokana. do.
 serokolo. *Carissa bispinosa**
 sesetu. *Gossypium* spp.*
 seswa gadi. *Jatropha zeyheri*, liquor from
 tuber used for tanning.
 setaba batsumi. *Blepharis serrulata*, herb.
 setshe. *Acacia stolonifera**
 sethangsweng. *Gymnema sylvestre**
 siboana. *Sesamothamnus lugardii**
 sifonkola. *Cassia abbreviata**
 sihogwe. *Gloriosa* spp. Red fldr lillies.
 siki. *Acacia stolonifera**
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 grass.
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 simai. *Antidesma venosum**
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 sipodisi. *Acanthospermum xanthoides*,
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 sipumbula matakao. *Albizia rhodesica**
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 sittha ba kulubi. *Xanthium spinosum*,
 Cocklebur.

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 herb.
 sitasutsau. *Lycium tenue**
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 sitsi. do.
 sixocomo. see nakgwa.
 somasekgwa. *Lasiosiphon burchellii*, fibre
 plant.
 sulu. *Gardenia spathulifolia**
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T

tati?. *Ptaeroxylon obliquum**
 tedu tsa banna. *Triumfetta pentandra*,
 herb.
 thepe. *Amarantus paniculatus*, a "spin-
 ach".
 tobega. *Erythrococca menyhartii**
 togo tswau. *Aerva leucura**
 torungwe. *Eleusine indica*, grass.
 tota. *Panicum coloratum*, grass.
 tothothwari. *Cyperus longus* var. *tenui-
 folius*, sedge used for basket making.
 tsaro. *Phoenix reclinata*, Wild Date Palm.
 tsaudi. *Guibortia coleosperma**
 ntshetsheni. *Zizyphus mucronata**
 tshikabanna. *Pavetta zeyheri**
 tshika di thate. *Lasiosiphon kraussianus*,
 fibre plant.
 tshikitshane. *Eragrostis gangetica*, grass.
 tshipi ya magala. *Sphedamnocarpus
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 tshuke. *Vellozia retinervis*, blue fldr rock
 plant, stem used as brush.
 tsiingisi. *Combretum apiculatum**
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 tswai. *Nymphaea* spp. Water Lily.
 tuu. *Suaeda fruticosa**
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U

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 ukusi. *Baikiaea plurijuga**
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 upupa. *Combretum coriaceum**
 utunda. *Diospyros mespiliformis**
 usimba. *Dialium simii**
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Z

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